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G-000-709.33

**QUARTERLY REPORT LIQUID RADIATION
DISCHARGES APRIL THROUGH JUNE, 1990**

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**DOE-FMPC/USEPA
77
REPORT**

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ENCLOSURE 2

QUARTERLY REPORT
LIQUID RADIATION DISCHARGES
APRIL THROUGH JUNE, 1990

01

QUARTERLY REPORT
LIQUID RADIATION DISCHARGES
APRIL THROUGH JUNE, 1990

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FEDERAL FACILITIES COMPLIANCE AGREEMENT
RADIATION DISCHARGE INFORMATION SECTION - ITEM A.1

U. S. DEPARTMENT OF ENERGY
FEED MATERIALS PRODUCTION CENTER
FERNALD, OHIO

LIQUID DISCHARGE MONITORING DATA IN RESPONSE TO ITEM A1
OF THE RADIATION DISCHARGE INFORMATION SECTION
FEDERAL FACILITIES COMPLIANCE AGREEMENT

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Introduction

This report is submitted in response to Item A1 of the Radiation Discharge Information Section of the Federal Facilities Compliance Agreement (FFCA), specifically, the U.S. EPA has required the following action:

"Maintain continuous liquid discharge sample collectors at all discharge points, monitor and report results quarterly to U.S. EPA, Ohio EPA and Ohio Department of Public Health."

Attached are Monthly Discharge Monitoring Reports and Effluent Radiation Reports (except Discharge 602) for Discharges 001, 002, 601 through 606 for the period April through June, 1990. Also included is radionuclide monthly/quarterly composite sample data for Discharge 001 for the first and second quarters of 1990. Analysis of some composite samples has not been completed at this time; results will be provided in a subsequent quarterly report.

Discharge 001 - Total Discharge

This discharge consists of the combined treated sanitary and industrial wastewaters, and stormwater. The industrial wastewaters are from the chemical and metallurgical refining of uranium. The principal product of the FMPC is uranium metal. The monitoring point for this discharge is Manhole 175. The treated effluents are discharged to the Great Miami River via Manhole 175.

Discharge 001 is continuously monitored for flow and pH. Discharges are analyzed daily for alpha and beta radiation, and uranium. The alpha, beta, and uranium data are tabulated, converted to activity units and reported to the U.S. EPA, Ohio EPA, and the Ohio Department of Public Health. Copies of these reports are included in this submittal. In addition, at an average frequency of once every seven (7) days, this discharge is also analyzed for oil and grease, total suspended solids, fluorides, nitrates, ammonia, dissolved oxygen, BOD, cyanide, copper, hexavalent and total chromium, lead, silver, and nickel. This data is tabulated and reported monthly to the Ohio EPA, as required by the NPDES permit. Copies of these reports are included in this submittal. Weekly grab samples are analyzed for thorium-234. These results have been tabulated on a monthly basis and are included in this submittal. The daily samples are composited and analyzed monthly for neptunium-237, plutonium-238, plutonium-239/240, technetium-99, potassium-40, actinium-227, lead-210, thorium-228, thorium-230, thorium-232, uranium-233, uranium-234, uranium-235, uranium-236, uranium-238, radium-226, and radium-228. The daily samples are composited and analyzed quarterly for cesium-137, ruthenium-106, and strontium-90. Available results have been tabulated, converted to activity units and are included in this submittal.

Discharge 002 - Discharge Prior to Ditch to Paddy's Run

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This discharge consists of the overflow to Paddy's Run via a spillway from the Stormwater Retention Basin.

Discharge 002 is monitored daily during overflows for flow and pH. Each overflow is also analyzed daily for alpha and beta radiation and uranium. The alpha, beta, and uranium data have been tabulated, converted to activity units and included in this submittal. Discharges from 002 are also analyzed daily for oil and grease, total suspended solids, hexavalent and total chromium, copper, nickel, silver, ammonia, nitrogen, and fluorides. These data are tabulated and reported monthly to the Ohio EPA, as required by the NPDES permit. Copies of these reports are included in this submittal.

Discharge 601 - Sanitary Treatment Plant

The sanitary sewage is generated by the restrooms, locker rooms, and laundry. The Sewage Treatment Plant is a secondary type facility (trickling filter). The treated effluent is discharged to Manhole 175.

Discharge 601 is continuously monitored for flow and pH. Discharges are analyzed daily for uranium. The uranium data has been tabulated, converted to activity units and included in this submittal. In addition, at an average frequency of once every seven (7) days, this discharge is also analyzed for total suspended solids, BOD, fecal coliform bacteria, fluorides, total chromium, copper, nickel, and ammonia. These data are tabulated and reported monthly to the Ohio EPA, as required by the NPDES permit. Copies of these reports are included in this submittal.

Discharge 602 - General Sump

The General Sump receives three (3) types of industrial wastewaters. First is untreated wastewaters from the Refinery. These are raffinate and evaporator condensate, which are combined, neutralized, and transferred to Plant 8 for filtration. The filtrate is returned to the General Sump and pumped to the BDN facility for further treatment. Uranium and pH are analyzed for process control purposes. These data are not reported to any outside organization.

Second is the effluents from the pretreatment facilities serving the refinery, recovery, and metals operations. These are accumulated and pumped to the BDN facility for further treatment. Uranium, copper, and pH are analyzed for process control purposes. These data are not reported to any outside organization.

Third is the potable water production and powerhouse waste streams. These are combined and decanted. The sludge is pumped to storage lagoons. The supernate, Discharge 602, is grab sampled and discharged on a batch basis to Manhole 175. At an average frequency of once every seven (7) days, this discharge is analyzed for pH, hexavalent and total chromium, copper, and nickel. These data, along with daily flows are tabulated and reported monthly to the Ohio EPA, as required by the NPDES permit. Copies of these reports are included in this submittal. Discharge 602 is considered to be uncontaminated; accordingly, radionuclides are not analyzed.

Discharge 603 - Clearwell

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This discharge consists of the collected stormwater runoff from the waste pit area. This effluent is pumped to the biosurge lagoon as necessary to control the water level. The option to pump to Manhole 175 is still available, if needed. Discharge 603 is continuously monitored for flow and analyzed daily for pH, alpha and beta radiation, and uranium (when it is pumped to Manhole 175). The alpha, beta, and uranium data have been tabulated, converted to activity units and included in this submittal.

Discharge 604 - Storm Sewer Lift Station

This discharge consists of the stormwater runoff from the production area. It is monitored at Manhole 34, from which stormwater is pumped to Manhole 175. If the pumps are surcharged, the excess overflows to the Stormwater Retention Basin.

Discharge 604 is continuously monitored for flow and pH. Discharges are also analyzed daily for uranium. The uranium data is tabulated, converted to activity units, and included in this submittal. In addition, at an average frequency of once every seven (7) days, this discharge is also analyzed for total suspended solids, oil and grease, fluorides, and nitrates. These data are tabulated and reported monthly to the Ohio EPA, as required by the NPDES permit. Copies of these reports are included in this submittal.

Discharge 605 - Bioreactor

This discharge consists of denitrified industrial wastewaters. These wastewaters originate primarily from the refinery and metals plants. The denitrified BDN effluent is returned to the General Sump for pretreatment and then discharged to the Sanitary Treatment Plant.

Discharge 605 is continuously monitored for flow and pH. Discharges are also analyzed daily for alpha and beta radiation and uranium. The alpha, beta and uranium data are tabulated, converted to activity units and are included in this submittal. In addition, at an average frequency of once every seven (7) days, this discharge is also analyzed for total suspended solids, BOD, nitrates, fluorides, hexavalent and total chromium, copper, nickel, and ammonia. These data are tabulated and reported monthly to the Ohio EPA, as required by the NPDES permit. Copies of these reports are included in this submittal.

Discharge 606 - Stormwater Retention Basin

This discharge consists of the collected stormwater runoff from the employee parking areas and excess stormwater from the production area. It is pumped to Manhole 175.

Discharge 606 is continuously monitored for flow and pH (when it is pumped). It is also analyzed daily for total suspended solids and oil and grease (when it is pumped). These data are tabulated and reported monthly to the Ohio EPA, as required by the NPDES permit. Copies of these reports are included in this submittal.

Location : 001 Total Discharge
Manhole 175

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Date: Second Quarter 1990

April			May		
Day	Flow (MGD)	Th-234 pCi/l*	Day	Flow (MGD)	Th-234 pCi/l*
5	0.303	22.00	4	0.605	<0.47
6	0.275	96.00	11	0.647	<0.50
13	0.953	68.00	18	1.170	30.00
20	0.589	58.00	25	<u>0.995</u>	<u>120.00</u>
27	<u>0.826</u>	<u><0.52</u>			
TOTAL	2.946	244.52	TOTAL	3.417	150.97
AVE.	0.589	44.96	AVE.	0.854	45.39
MAX.	0.953	96.00	MAX.	1.170	120.00
MIN.	0.275	<0.52	MIN.	0.605	<0.47

June

Day	Flow (MGD)	Th-234 pCi/l*
1	0.986	3.00
8	0.851	<0.43
15	0.616	210.00
22	0.279	89.00
29	<u>0.480</u>	<u>69.00</u>
TOTAL	3.212	371.43
AVE.	0.642	59.35
MAX.	0.986	210.00
MIN.	0.279	<0.43

* Average values presented are flow weighted

Feed Materials Production Center
 U.S. Department of Energy
 7400 Willey Road, P.O.Box 398704
 Cincinnati, Ohio 45239 Hamilton
 8502 M 8612 801002

11000004001
 001 Total Discharge
 Manhole 175 (Effluent to Great Miami River)

1990  

Monthly/Quarterly Composites

Radionuclide	Jan (pCi/l)	Feb (pCi/l)	Mar (pCi/l)	Apr (pCi/l)	May (pCi/l)	Jun (pCi/l)	Jul (pCi/l)	Aug (pCi/l)	Sep (pCi/l)	Oct (pCi/l)	Nov (pCi/l)	Dec (pCi/l)	MIN. (pCi/l)	MAX. (pCi/l)	AVG.* (pCi/l)	DOE DCG	Analysis Schedule
Cesium-137	N/R	N/R	AH	N/R	N/R	AH	N/R	N/R		N/R	N/R		N/A	N/A	N/A	3000	Qtrly
V-237	AH						N/A	N/A	N/A	30	Monthly						
Pu-238	AH						N/A	N/A	N/A	40	Monthly						
Pu-239/240	AH						N/A	N/A	N/A	30	Monthly						
Ru-106	N/R	N/R	AH	N/R	N/R	AH	N/R	N/R		N/R	N/R		N/A	N/A	N/A	6000	Qtrly
Strontium-90	N/R	N/R	AH	N/R	N/R	AH	N/R	N/R		N/R	N/R		N/A	N/A	N/A	1000	Qtrly
Technetium-99<	290	290 <	5300 <	5300 <	5300	AH	AH						290	5300	3371	100000	Monthly
K-40	AH						N/A	N/A	N/A	7000	Monthly						
Ac-227	AH						N/A	N/A	N/A	10	Monthly						
Lead-210	AH						N/A	N/A	N/A	30	Monthly						
Thorium-228	AH						N/A	N/A	N/A	400	Monthly						
Thorium-230	AH						N/A	N/A	N/A	300	Monthly						
Thorium-232	AH						N/A	N/A	N/A	50	Monthly						
Uranium-233	< 99.1 <	91.1 <	84.0 <	69.0 <	94.1	93.0	AH						69.0	99.1	89.1	500	Monthly
Uranium-234	320.8	118.0	163.2	178.7	243.7	240.9	AH						118.0	320.8	205.6	500	Monthly
Uranium-235	15.3	12.9	11.5	10.0	12.2	12.3	AH						10.0	15.3	12.3	600	Monthly
Uranium-236	12.6	7.9	9.0	6.0	7.6	8.1	AH						6.0	12.6	8.4	500	Monthly
Uranium-238	342.8	315.3	290.8	238.7	325.9	322.0	AH						238.7	342.8	308.3	600	Monthly
Radium-226	1.9	8.9 <	2.9 <	0.9 <	1.9 <	1.8	AH						0.9	8.9	3.4	100	Monthly
Radium-228	< 4.0	9.0 <	3.3 <	3.4	23.0	40.0	AH						3.3	40.0	14.4	100	Monthly

AH - Sample collected, but not yet analyzed

N/R - Not Required, quarterly composite

Avg.* - flow-weighted

N/A - Not Applicable

EFFLUENT RADIATION REPORT

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FACILITY: Feed Materials Production Center
 U.S. Department of Energy
 7400 Willey Road, P.O.Box 398704
 Cincinnati, Ohio 45239 Hamilton
 9002 M 9501 900212

LOCATION: 1I000004606
 606 Stormwater Retention Basin
 Stormwater Retention Basin (Effluent to Manhole 175)

DATE: MARCH 1990

Day	Flow (MGD)	Total U (mg/l)	Calculated Total U-238 (pCi/l) (1)
1	0.450	0.44	149
2	0.142	0.50	169
3	0.287	0.54	182
4	0.505	0.56	189
5	0.487	0.50	169
6	0.454	0.52	176
7	0.466	0.48	162
8	0.245	0.48	162
9	0.000	0.00	0
10	0.245	0.32	108
11	0.467	0.38	128
12	0.114	0.40	135
13	0.108	0.34	115
14	0.000	0.00	0
15	0.000	0.00	0
16	0.500	0.48	162
17	0.515	0.48	162
18	0.460	0.76	257
19	0.251	0.70	236
20	0.000	0.00	0
21	0.311	0.76	257
22	0.495	0.64	216
23	0.396	0.88	297
24	0.503	1.04	351
25	0.487	0.98	331
26	0.296	0.92	311
27	0.232	0.54	182
28	0.000	0.00	0
29	0.000	0.00	0
30	0.000	0.00	0
31	0.000	0.00	0
<hr/>		Total	8.416

EFFLUENT RADIATION REPORT (cont.)

FACILITY: Feed Materials Production Center

LOCATION: 606 Stormwater Retention Basin

DATE: MARCH 1990

	Flow (MGD)	Total U (mg/l)	Calculated Total U-238 (pCi/l)(1)
Avg.	0.443	0.62	208
Max.	0.515	1.04	351
Min.	0.108	0.32	108

Comments: (1) The activity of this discharge has been and will continue to be reported as Uranium-238 (pCi/l) in accordance with the Ohio EPA format for reporting uranium. Since this does not account for the activity of the other uranium isotopes in the effluent, the total uranium data is also presented. The calculated total U-238 is based on a conversion factor of 337.84 applied to the measured value of total uranium.

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EFFLUENT RADIATION REPORT

FACILITY: Feed Materials Production Center
 U.S. Department of Energy
 7400 Willey Road, P.O.Box 398704
 Cincinnati, Ohio 45239 Hamilton
 8502 M 8612 801002

LOCATION: 1I000004001
 001 Total Discharge
 Manhole 175 (Effluent to Great Miami River)

DATE: APRIL 1990

Day	Flow (MGD)	Total Alpha (pCi/l)	Total Beta (pCi/l)	Total U (mg/l)	Total U (kgs)	Calculated Total U-238 (pCi/l) (1)
1	0.435	847	180	1.88	3.09	635
2	0.331	1005	198	1.48	1.85	500
3	0.449	734	167	1.08	1.83	365
4	0.329	536	117	0.94	1.17	318
5	0.303	450	203	0.92	1.05	311
6	0.275	459	194	0.88	0.92	297
7	0.344	365	122	0.76	0.99	257
8	0.297	338	248	0.68	0.76	230
9	0.281	383	72	0.56	0.60	189
10	0.285	306	167	0.48	0.52	162
11	0.991	482	207	0.70	2.62	236
12	0.951	572	212	0.98	3.53	331
13	0.953	441	90	0.86	3.10	291
14	0.652	441	81	0.82	2.02	277
15	0.881	473	86	0.82	2.73	277
16	0.574	477	104	0.88	1.91	297
17	0.332	450	248	0.62	0.78	209
18	0.607	329	104	0.50	1.15	169
19	0.643	252	104	0.30	0.73	101
20	0.589	428	171	0.48	1.07	162
21	0.627	387	153	0.48	1.14	162
22	0.639	410	86	0.62	1.50	209
23	0.644	532	203	0.80	1.95	270
24	0.702	378	135	0.54	1.43	182
25	0.766	383	99	0.52	1.51	176
26	0.773	928	194	0.50	1.46	169
27	0.826	441	126	0.48	1.50	162
28	0.570	266	149	0.44	0.95	149
29	0.000	0	0	0.00	0.00	0
30	0.453	365	113	0.44	0.75	149
Total	16.502			44.62		

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EFFLUENT RADIATION REPORT (cont.)

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FACILITY: Feed Materials Production Center

LOCATION: 001 Total Discharge

DATE: APRIL 1990

	Flow (MGD)	Total Alpha (pCi/l)(2)	Total Beta (pCi/l)(2)	Total U (mg/l)(2)	Total U (kgs)	Calculated Total U-238 (pCi/l)(1)(2)
Avg.	0.550	477	145	0.71	1.49	241
Max.	0.991	1005	248	1.88	3.53	635
Min.	0.000	0	0	0.00	0.00	0

The average uranium concentration for the previous twelve months was 0.86 mg/l. This is 96.6 percent of the Derived Concentration Guide(DOE Order 5400.5) for ingested water.

- Comments:
- (1) The activity of this discharge has been and will continue to be reported as Uranium-238 (pCi/l) in accordance with the Ohio EPA format for reporting uranium. Since this does not account for the activity of the other uranium isotopes in the effluent, the total uranium data is also presented. The calculated total U-238 is based on a conversion factor of 337.84 applied to the measured value of total uranium.
 - (2) Average values presented are flow-weighted.

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EFFLUENT RADIATION REPORT

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FACILITY: Feed Materials Production Center
U.S. Department of Energy
7400 Willey Road, P.O.Box 398704
Cincinnati, Ohio 45239 Hamilton
8502 M 8612 801002

LOCATION: 1I000004002
002 Discharge (Overflow) to Storm Sewer Outfall Ditch
Stormwater Retention Basin Spillway (Effluent to Paddy's Run)

DATE: APRIL 1990

There was no discharge to Paddy's Run from the Stormwater
Retention Basin.

Based on 3.12 inches of rainfall for the month, the uranium
discharged to Paddy's Run from uncontrolled areas of the FMPC
is estimated to be 14.04 kgs.

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EFFLUENT RADIATION REPORT

FACILITY: Feed Materials Production Center
 U.S. Department of Energy
 7400 Willey Road, P.O.Box 398704
 Cincinnati, Ohio 45239 Hamilton
 8502 M 8612 801002

LOCATION: 1I000004601
 601 (001A) Sanitary Treatment Plant
 Ultraviolet Unit/Contact Tank (Effluent to Manhole 175)

DATE: APRIL 1990

Day	Flow (MGD)	Total U (mg/l)	Total U (kgs)	Calculated Total U-238 (pCi/l) (1)
1	0.183	1.42	0.98	480
2	0.177	1.94	1.30	655
3	0.158	1.46	0.87	493
4	0.101	0.74	0.28	250
5	0.086	0.48	0.16	162
6	0.080	1.44	0.44	486
7	0.104	1.20	0.47	405
8	0.116	1.04	0.46	351
9	0.103	1.44	0.56	486
10	0.118	1.04	0.46	351
11	0.205	1.22	0.95	412
12	0.111	1.46	0.61	493
13	0.103	0.06	0.02	20
14	0.025	0.04	0.00	14
15	0.069	0.12	0.03	41
16	0.196	0.08	0.06	27
17	0.082	0.22	0.07	74
18	0.096	0.18	0.07	61
19	0.102	0.09	0.03	30
20	0.094	0.08	0.03	27
21	0.115	0.05	0.02	17
22	0.163	0.07	0.04	24
23	0.276	0.05	0.05	17
24	0.085	0.06	0.02	20
25	0.122	0.44	0.20	149
26	0.088	0.06	0.02	20
27	0.081	0.05	0.02	17
28	0.131	0.05	0.02	17
29	0.000	0.00	0.00	0
30	0.034	0.06	0.01	20
Total	3.404		8.26	

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EFFLUENT RADIATION REPORT (cont.)

FACILITY: Feed Materials Production Center
LOCATION: 601 (001A) Sanitary Treatment Plant
DATE: APRIL 1990

	Flow (MGD)	Total U (mg/l)(2)	Total U (kgs)	Calculated Total U-238 (pCi/l)(1)(2)
Avg.	0.113	0.64	0.28	217
Max.	0.276	1.94	1.30	655
Min.	0.000	0.00	0.00	0

Comments: (1) The activity of this discharge has been and will continue to be reported as Uranium-238 (pCi/l) in accordance with the Ohio EPA format for reporting uranium. Since this does not account for the activity of the other uranium isotopes in the effluent, the total uranium data is also presented. The calculated total U-238 is based on a conversion factor of 337.84 applied to the measured value of total uranium.

(2) Average values presented are flow-weighted.

EFFLUENT RADIATION REPORT

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FACILITY: Feed Materials Production Center
 U.S. Department of Energy
 7400 Willey Road, P.O.Box 398704
 Cincinnati, Ohio 45239 Hamilton
 8502 M 8612 801002

LOCATION: 1I000004603
 603 (001C) Clearwell
 Clearwell (Effluent to Manhole 175)

DATE: APRIL 1990

Day	Flow (MGD)	Total Alpha (pCi/l)	Total Beta (pCi/l)	Total U (mg/l)	Total U (kgs)	Calculated Total U-238 (pCi/l) (1)
1	0.000	0	0	0.00	0.00	0
2	0.000	0	0	0.00	0.00	0
3	0.000	0	0	0.00	0.00	0
4	0.000	0	0	0.00	0.00	0
5	0.000	0	0	0.00	0.00	0
6	0.000	0	0	0.00	0.00	0
7	0.000	0	0	0.00	0.00	0
8	0.000	0	0	0.00	0.00	0
9	0.000	0	0	0.00	0.00	0
10	0.000	0	0	0.00	0.00	0
11	0.000	0	0	0.00	0.00	0
12	0.000	0	0	0.00	0.00	0
13	0.000	0	0	0.00	0.00	0
14	0.000	0	0	0.00	0.00	0
15	0.000	0	0	0.00	0.00	0
16	0.000	0	0	0.00	0.00	0
17	0.000	0	0	0.00	0.00	0
18	0.000	0	0	0.00	0.00	0
19	0.000	0	0	0.00	0.00	0
20	0.000	0	0	0.00	0.00	0
21	0.000	0	0	0.00	0.00	0
22	0.000	0	0	0.00	0.00	0
23	0.000	0	0	0.00	0.00	0
24	0.000	0	0	0.00	0.00	0
25	0.000	0	0	0.00	0.00	0
26	0.000	0	0	0.00	0.00	0
27	0.000	0	0	0.00	0.00	0
28	0.000	0	0	0.00	0.00	0
29	0.000	0	0	0.00	0.00	0
30	0.000	0	0	0.00	0.00	0
				0.00		
Total	0.000			0.00		

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EFFLUENT RADIATION REPORT

FACILITY: Feed Materials Production Center
 U.S. Department of Energy
 7400 Willey Road, P.O.Box 398704
 Cincinnati, Ohio 45239 Hamilton
 8502 M 8612 801002

LOCATION: 1I000004604
 604 (001D) Storm Sewer Lift Station
 Manhole 34 (Stormwater to Manhole 175)

DATE: APRIL 1990

Day	Flow (MGD)	Total U (mg/l)	Total U (kgs)	Calculated Total U-238 (pCi/l) (1)
1	0.117	1.66	0.73	561
2	0.095	1.90	0.68	642
3	0.106	1.24	0.50	419
4	0.083	1.64	0.51	554
5	0.166	1.58	0.99	534
6	0.080	1.78	0.54	601
7	0.084	1.58	0.50	534
8	0.073	1.56	0.43	527
9	0.068	1.72	0.44	581
10	0.055	1.64	0.34	554
11	0.226	1.70	1.45	574
12	0.129	1.90	0.93	642
13	0.111	2.02	0.85	682
14	0.079	1.78	0.53	601
15	0.083	1.62	0.51	547
16	0.072	1.78	0.48	601
17	0.070	1.42	0.38	480
18	0.069	1.16	0.30	392
19	0.067	1.06	0.27	358
20	0.061	1.14	0.26	385
21	0.041	0.84	0.13	284
22	0.065	2.06	0.51	696
23	0.071	1.86	0.50	628
24	0.064	1.36	0.33	459
25	0.057	1.34	0.29	453
26	0.055	1.36	0.28	459
27	0.052	1.26	0.25	426
28	0.052	0.84	0.17	284
29	0.000	0.00	0.00	0
30	0.053	1.02	0.20	345
Total	2.404		8.26	

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EFFLUENT RADIATION REPORT (cont.)

FACILITY: Feed Materials Production Center
 LOCATION: 604 (001D) Storm Sewer Lift Station
 DATE: APRIL 1990

	Flow (MGD)	Total U (mg/l)(2)	Total U (kgs)	Calculated Total U-238 (pCi/l)(1)(2)
Avg.	0.080	1.57	0.28	531
Max.	0.226	2.06	1.30	696
Min.	0.000	0.00	0.00	0

Comments: (1) The activity of this discharge has been and will continue to be reported as Uranium-238 (pCi/l) in accordance with the Ohio EPA format for reporting uranium. Since this does not account for the activity of the other uranium isotopes in the effluent, the total uranium data is also presented. The calculated total U-238 is based on a conversion factor of 337.84 applied to the measured value of total uranium.

(2) Average values presented are flow-weighted.

EFFLUENT RADIATION REPORT

1272

FACILITY: Feed Materials Production Center
 U.S. Department of Energy
 7400 Willey Road, P.O.Box 398704
 Cincinnati, Ohio 45239 Hamilton
 8502 M 8612 801002

LOCATION: 1I000004605
 605 (001E) Bioreactor
 Tank 8/General Sump (Effluent to Sewage Treatment Plant)

DATE: APRIL 1990

Day	Flow (MGD)	Total Alpha (pCi/l)	Total Beta (pCi/l)	Total U (mg/l)	Total U (kgs)	Calculated Total U-238 (pCi/l) (1)
1	0.094	923	419	1.80	0.64	608
2	0.094	887	446	1.60	0.57	541
3	0.037	770	464	1.60	0.22	541
4	0.030	1059	559	1.50	0.17	507
5	0.000	0	0	0.00	0.00	0
6	0.000	0	0	0.00	0.00	0
7	0.000	0	0	0.00	0.00	0
8	0.000	0	0	0.00	0.00	0
9	0.000	0	0	0.00	0.00	0
10	0.000	0	0	0.00	0.00	0
11	0.000	0	0	0.00	0.00	0
12	0.000	0	0	0.00	0.00	0
13	0.000	0	0	0.00	0.00	0
14	0.000	0	0	0.00	0.00	0
15	0.000	0	0	0.00	0.00	0
16	0.000	0	0	0.00	0.00	0
17	0.000	0	0	0.00	0.00	0
18	0.000	0	0	0.00	0.00	0
19	0.000	0	0	0.00	0.00	0
20	0.000	0	0	0.00	0.00	0
21	0.000	0	0	0.00	0.00	0
22	0.000	0	0	0.00	0.00	0
23	0.000	0	0	0.00	0.00	0
24	0.000	0	0	0.00	0.00	0
25	0.000	0	0	0.00	0.00	0
26	0.000	0	0	0.00	0.00	0
27	0.000	0	0	0.00	0.00	0
28	0.000	0	0	0.00	0.00	0
29	0.000	0	0	0.00	0.00	0
30	0.000	0	0	0.00	0.00	0
Total		0.255			1.60	

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1272

EFFLUENT RADIATION REPORT (cont.)

FACILITY: Feed Materials Production Center

LOCATION: 605 (001E) Bioreactor

DATE: APRIL 1990

	Flow (MGD)	Total Alpha (pCi/l)(2)	Total Beta (pCi/l)(2)	Total U (mg/l)(2)	Total U (kgs)	Calculated Total U-238 (pCi/l)(1)(2)
Avg.	0.064	904	452	1.66	0.40	561
Max.	0.094	1059	559	1.80	0.64	608
Min.	0.030	770	419	1.50	0.17	507

Comments: (1) The activity of this discharge has been and will continue to be reported as Uranium-238 (pCi/l) in accordance with the Ohio EPA format for reporting uranium. Since this does not account for the activity of the other uranium isotopes in the effluent, the total uranium data is also presented. The calculated total U-238 is based on a conversion factor of 337.84 applied to the measured value of total uranium.

(2) Average values presented are flow-weighted.

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EFFLUENT RADIATION REPORT

FACILITY: Feed Materials Production Center
 U.S. Department of Energy
 7400 Willey Road, P.O.Box 398704
 Cincinnati, Ohio 45239 Hamilton
 9002 M 9501 900212

LOCATION: 1I000004606
 606 Stormwater Retention Basin
 Stormwater Retention Basin (Effluent to Manhole 175)

DATE: APRIL 1990

Day	Flow (MGD)	Total U (mg/l)	Total U (kgs)	Calculated Total U-238 (pCi/l) (1)
1	0.000	0.00	0.00	0
2	0.000	0.00	0.00	0
3	0.000	0.00	0.00	0
4	0.000	0.00	0.00	0
5	0.000	0.00	0.00	0
6	0.000	0.00	0.00	0
7	0.000	0.00	0.00	0
8	0.000	0.00	0.00	0
9	0.000	0.00	0.00	0
10	0.000	0.00	0.00	0
11	0.212	0.52	0.42	176
12	0.463	0.64	1.12	216
13	0.475	0.68	1.22	230
14	0.330	0.62	0.77	209
15	0.461	0.76	1.33	257
16	0.288	0.68	0.74	230
17	0.000	0.00	0.00	0
18	0.193	0.52	0.38	176
19	0.260	0.48	0.47	162
20	0.248	0.60	0.56	203
21	0.267	0.52	0.53	176
22	0.280	0.54	0.57	182
23	0.223	0.52	0.44	176
24	0.362	0.54	0.74	182
25	0.395	0.50	0.75	169
26	0.467	0.48	0.85	162
27	0.479	0.48	0.87	162
28	0.317	0.38	0.46	128
29	0.000	0.00	0.00	0
30	0.157	0.26	0.15	88
Total	5.877		12.37	

EFFLUENT RADIATION REPORT (cont.)

FACILITY: Feed Materials Production Center
 LOCATION: 606 Stormwater Retention Basin
 DATE: APRIL 1990

	Flow (MGD)	Total U (mg/l)(2)	Total U (kgs)	Calculated Total U-238 (pCi/l)(1)(2)
Avg.	0.327	0.56	0.69	188
Max.	0.479	0.76	1.33	257
Min.	0.157	0.26	0.15	88

Comments: (1) The activity of this discharge has been and will continue to be reported as Uranium-238 (pCi/l) in accordance with the Ohio EPA format for reporting uranium. Since this does not account for the activity of the other uranium isotopes in the effluent, the total uranium data is also presented. The calculated total U-238 is based on a conversion factor of 337.84 applied to the measured value of total uranium.

(2) Average values presented are flow-weighted.

EFFLUENT RADIATION REPORT

1272

FACILITY: Feed Materials Production Center
 U.S. Department of Energy
 7400 Willey Road, P.O.Box 398704
 Cincinnati, Ohio 45239 Hamilton
 8502 M 8612 801002

LOCATION: 1I000004001
 001 Total Discharge
 Manhole 175 (Effluent to Great Miami River)

DATE: MAY 1990

Day	Flow (MGD)	Total Alpha (pCi/l)	Total Beta (pCi/l)	Total U (mg/l)	Total U (kgs)	Calculated Total U-238 (pCi/l) (1)
1	0.820	374	77	0.56	1.74	189
2	0.862	306	68	0.64	2.09	216
3	0.742	383	104	0.78	2.19	264
4	0.605	374	113	0.58	1.33	196
5	1.065	351	86	0.42	1.69	142
6	1.061	581	72	0.94	3.77	318
7	1.039	455	77	0.82	3.22	277
8	1.051	482	72	0.98	3.90	331
9	0.684	414	113	0.90	2.33	304
10	0.720	446	126	0.96	2.61	324
11	0.647	266	126	0.70	1.71	236
12	0.588	541	347	0.98	2.18	331
13	0.582	284	135	0.52	1.14	176
14	1.377	1676	1369	3.82	19.90	1291
15	0.917	464	275	0.78	2.71	264
16	1.105	608	329	1.00	4.18	338
17	1.368	401	221	0.62	3.21	209
18	1.170	595	162	0.76	3.36	257
19	1.323	1405	914	3.04	15.21	1027
20	0.828	604	221	0.98	3.07	331
21	0.760	626	356	0.98	2.82	331
22	1.103	410	216	0.80	3.34	270
23	1.112	554	185	0.62	2.61	209
24	1.115	505	194	0.72	3.04	243
25	0.995	401	405	0.66	2.48	223
26	1.041	378	117	0.58	2.28	196
27	0.988	401	122	0.58	2.17	196
28	0.994	387	122	0.60	2.26	203
29	1.069	320	122	0.70	2.83	236
30	1.140	356	158	0.66	2.85	223
31	1.208	342	149	0.60	2.74	203
Total	30.079			110.960		

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EFFLUENT RADIATION REPORT (cont.)

1272

FACILITY: Feed Materials Production Center

LOCATION: 001 Total Discharge

DATE: MAY 1990

	Flow (MGD)	Total Alpha (pCi/l)(2)	Total Beta (pCi/l)(2)	Total U (mg/l)(2)	Total U (kgs)	Calculated Total U-238 (pCi/l)(1)(2)
Avg.	0.970	537	256	0.98	3.58	329
Max.	1.377	1676	1369	3.82	19.90	1291
Min.	0.582	266	68	0.42	1.14	142

The average uranium concentration for the previous twelve months was 0.84 mg/l. This is 94.4 percent of the Derived Concentration Guide(DOE Order 5400.5) for ingested water.

- Comments:
- (1) The activity of this discharge has been and will continue to be reported as Uranium-238 (pCi/l) in accordance with the Ohio EPA format for reporting uranium. Since this does not account for the activity of the other uranium isotopes in the effluent, the total uranium data is also presented. The calculated total U-238 is based on a conversion factor of 337.84 applied to the measured value of total uranium.
 - (2) Average values presented are flow-weighted.

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EFFLUENT RADIATION REPORT

FACILITY: Feed Materials Production Center
 U.S. Department of Energy
 7400 Willey Road, P.O.Box 398704
 Cincinnati, Ohio 45239 Hamilton
 8502 M 8612 801002

LOCATION: 1I000004002
 002 Discharge (Overflow) to Storm Sewer Outfall Ditch
 Stormwater Retention Basin Spillway (Effluent to Paddy's Run)

DATE: MAY 1990

Day	Flow (MGD)	Total Alpha (pCi/l)	Total Beta (pCi/l)	Total U (mg/l)	Total U (kgs)	Calculated Total U-238 (pCi/l) (1)
1	0.000	0	0	0.00	0.00	0
2	0.000	0	0	0.00	0.00	0
3	0.000	0	0	0.00	0.00	0
4	0.000	0	0	0.00	0.00	0
5	0.000	0	0	0.00	0.00	0
6	0.000	0	0	0.00	0.00	0
7	0.000	0	0	0.00	0.00	0
8	0.000	0	0	0.00	0.00	0
9	0.000	0	0	0.00	0.00	0
10	0.000	0	0	0.00	0.00	0
11	0.000	0	0	0.00	0.00	0
12	0.000	0	0	0.00	0.00	0
13	0.000	0	0	0.00	0.00	0
14	0.000	0	0	0.00	0.00	0
15	0.000	0	0	0.00	0.00	0
16	0.000	0	0	0.00	0.00	0
17	0.608	311	117	0.52	1.20	176
18	0.010	378	72	0.62	0.02	209
19	0.000	0	0	0.00	0.00	0
20	0.000	0	0	0.00	0.00	0
21	0.000	0	0	0.00	0.00	0
22	0.000	0	0	0.00	0.00	0
23	0.000	0	0	0.00	0.00	0
24	0.000	0	0	0.00	0.00	0
25	0.000	0	0	0.00	0.00	0
26	0.000	0	0	0.00	0.00	0
27	0.000	0	0	0.00	0.00	0
28	0.000	0	0	0.00	0.00	0
29	0.000	0	0	0.00	0.00	0
30	0.000	0	0	0.00	0.00	0
31	0.000	0	0	0.00	0.00	0
Total	0.618				1.22	

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1272

EFFLUENT RADIATION REPORT (cont.)

FACILITY: Feed Materials Production Center

LOCATION: 002 Discharge (Overflow) to Storm Sewer Outfall Ditch

DATE: MAY 1990

	Flow (MGD)	Total Alpha (pCi/l)(2)	Total Beta (pCi/l)(2)	Total U (pCi/l)(2)	Total U (kgs)	Calculated Total U-238 (pCi/l)(1)(2)
Avg.	0.309	312	116	0.52	1.35	176
Max.	0.608	378	117	0.62	1.20	209
Min.	0.010	311	72	0.52	0.05	176

Based on 9.81 inches of rainfall for the month, the uranium discharge to Paddy's Run from uncontrolled areas of the FMPC is estimated to be 44.145 kg.

Comments: (1) The activity of this discharge has been and will continue to be reported as Uranium-238 (pCi/l) in accordance with the Ohio EPA format for reporting uranium. Since this does not account for the activity of the other uranium isotopes in the effluent, the total uranium data is also presented. The calculated total U-238 is based on a conversion factor of 337.84 applied to the measured value of total uranium.

(2) Average values presented are flow-weighted.

1272

EFFLUENT RADIATION REPORT

FACILITY: Feed Materials Production Center
 U.S. Department of Energy
 7400 Willey Road, P.O.Box 398704
 Cincinnati, Ohio 45239 Hamilton
 8502 M 8612 801002

LOCATION: 1I000004601
 601 (001A) Sanitary Treatment Plant
 Ultraviolet Unit/Contact Tank (Effluent to Manhole 175)

DATE: MAY 1990

Day	Flow (MGD)	Total U (mg/l)	Total U (kgs)	Calculated Total U-238 (pCi/l) (1)
1	0.111	0.08	0.03	27
2	0.108	0.08	0.03	27
3	0.049	0.09	0.02	30
4	0.090	0.09	0.03	30
5	0.193	0.11	0.08	37
6	0.113	0.21	0.09	71
7	0.037	0.26	0.04	88
8	0.078	0.26	0.08	88
9	0.072	0.20	0.05	68
10	0.068	0.12	0.03	41
11	0.075	0.08	0.02	27
12	0.079	0.20	0.06	68
13	0.114	0.24	0.10	81
14	0.076	0.21	0.06	71
15	0.091	0.23	0.08	78
16	0.169	0.13	0.08	44
17	0.236	0.24	0.21	81
18	0.133	0.22	0.11	74
19	0.119	0.17	0.08	57
20	0.055	0.16	0.03	54
21	0.019	0.17	0.01	57
22	0.097	0.32	0.12	108
23	0.073	0.28	0.08	95
24	0.080	0.12	0.04	41
25	0.061	0.10	0.02	34
26	0.081	0.10	0.03	34
27	0.043	0.06	0.01	20
28	0.037	0.16	0.02	54
29	0.056	0.16	0.03	54
30	0.091	0.22	0.08	74
31	0.077	0.22	0.06	74
Total	2.781		1.83	

EFFLUENT RADIATION REPORT (cont.)

FACILITY: Feed Materials Production Center
 LOCATION: 601 (001A) Sanitary Treatment Plant
 DATE: MAY 1990

	Flow (MGD)	Total U (mg/l)(2)	Total U (kgs)	Calculated Total U-238 (pCi/l)(1)(2)
Avg.	0.090	0.17	0.06	59
Max.	0.236	0.32	0.21	108
Min.	0.019	0.06	0.01	20

Comments: (1) The activity of this discharge has been and will continue to be reported as Uranium-238 (pCi/l) in accordance with the Ohio EPA format for reporting uranium. Since this does not account for the activity of the other uranium isotopes in the effluent, the total uranium data is also presented. The calculated total U-238 is based on a conversion factor of 337.84 applied to the measured value of total uranium.

(2) Average values presented are flow-weighted.

1272

EFFLUENT RADIATION REPORT

FACILITY: Feed Materials Production Center
 U.S. Department of Energy
 7400 Willey Road, P.O.Box 398704
 Cincinnati, Ohio 45239 Hamilton
 8502 M 8612 801002

LOCATION: 1I000004603
 603 (001C) Clearwell
 Clearwell (Effluent to Manhole 175)

DATE: MAY 1990

Day	Flow (mgd)	Total Alpha (pCi/l)	Total Beta (pCi/l)	Total U (mg/l)	Total U (kgs)	Calculated Total U-238 (pCi/l) (1)
1	0.000	0	0	0.00	0.00	0
2	0.000	0	0	0.00	0.00	0
3	0.000	0	0	0.00	0.00	0
4	0.000	0	0	0.00	0.00	0
5	0.000	0	0	0.00	0.00	0
6	0.000	0	0	0.00	0.00	0
7	0.000	0	0	0.00	0.00	0
8	0.000	0	0	0.00	0.00	0
9	0.000	0	0	0.00	0.00	0
10	0.000	0	0	0.00	0.00	0
11	0.000	0	0	0.00	0.00	0
12	0.000	0	0	0.00	0.00	0
13	0.000	0	0	0.00	0.00	0
14	0.439	3468	3054	8.30	13.78	2804
15	0.000	0	0	0.00	0.00	0
16	0.000	0	0	0.00	0.00	0
17	0.000	0	0	0.00	0.00	0
18	0.000	0	0	0.00	0.00	0
19	0.435	3685	2450	8.72	14.35	2946
20	0.000	0	0	0.00	0.00	0
21	0.000	0	0	0.00	0.00	0
22	0.000	0	0	0.00	0.00	0
23	0.000	0	0	0.00	0.00	0
24	0.000	0	0	0.00	0.00	0
25	0.000	0	0	0.00	0.00	0
26	0.000	0	0	0.00	0.00	0
27	0.000	0	0	0.00	0.00	0
28	0.000	0	0	0.00	0.00	0
29	0.000	0	0	0.00	0.00	0
30	0.000	0	0	0.00	0.00	0
31	0.000	0	0	0.00	0.00	0
Total		0.874			28.13	

1272

EFFLUENT RADIATION REPORT (cont.)

FACILITY: Feed Materials Production Center

LOCATION: 603 (001C) Clearwell

DATE: MAY 1990

	Flow (mgd)	Total Alpha (pCi/l)(2)	Total Beta (pCi/l)(2)	Total U (mg/l)(2)	Total U (kgs)	Calculated Total U-238 (pCi/l)(1)(2)
Avg.	0.437	3576	2754	8.51	14.07	2875
Max.	0.439	3685	3054	8.72	14.35	2946
Min.	0.435	3468	2450	8.30	13.78	2804

Comments: (1) The activity of this discharge has been and will continue to be reported as Uranium-238 (pCi/l) in accordance with the Ohio EPA format for reporting uranium. Since this does not account for the activity of the other uranium isotopes in the effluent, the total uranium data is also presented. The calculated total U-238 is based on a conversion factor of 337.84 applied to the measured value of total uranium.

(2) Average values presented are flow-weighted.

1272

EFFLUENT RADIATION REPORT

FACILITY: Feed Materials Production Center
 U.S. Department of Energy
 7400 Willey Road, P.O.Box 398704
 Cincinnati, Ohio 45239 Hamilton
 8502 M 8612 801002

LOCATION: 1I000004604
 604 (001D) Storm Sewer Lift Station
 Manhole 34 (Stormwater to Manhole 175)

DATE: MAY 1990

Day	Flow (MGD)	Total U (mg/l)	Total U (kgs)	Calculated Total U-238 (pCi/l) (1)
1	0.064	1.54	0.37	520
2	0.061	1.20	0.28	405
3	0.075	1.56	0.44	527
4	0.014	1.04	0.06	351
5	0.267	1.06	1.07	358
6	0.214	1.76	1.42	595
7	0.124	2.06	0.97	696
8	0.089	2.10	0.71	709
9	0.073	2.00	0.55	676
10	0.039	1.24	0.18	419
11	0.081	1.22	0.37	412
12	0.070	0.88	0.23	297
13	0.000	0.00	0.00	0
14	0.129	2.04	1.00	689
15	0.114	1.52	0.66	514
16	0.344	1.28	1.67	432
17	0.407	1.08	1.66	365
18	0.403	1.20	1.83	405
19	0.263	1.16	1.15	392
20	0.151	1.20	0.69	405
21	0.245	1.46	1.35	493
22	0.104	1.28	0.50	432
23	0.049	1.46	0.27	493
24	0.016	1.16	0.07	392
25	0.000	0.00	0.00	0
26	0.000	0.00	0.00	0
27	0.000	0.00	0.00	0
28	0.000	0.00	0.00	0
29	0.000	0.00	0.00	0
30	0.000	0.00	0.00	0
31	0.000	0.00	0.00	0
Total	3.396		1.83	

EFFLUENT RADIATION REPORT (cont.)

FACILITY: Feed Materials Production Center
 LOCATION: 604 (001D) Storm Sewer Lift Station
 DATE: MAY 1990

	Flow (MGD)	Total U (mg/l)(2)	Total U (kgs)	Calculated Total U-238 (pCi/l)(1)(2)
Avg.	0.148	1.36	0.08	460
Max.	0.407	2.10	0.21	709
Min.	0.014	0.88	0.06	351

Comments: (1) The activity of this discharge has been and will continue to be reported as Uranium-238 (pCi/l) in accordance with the Ohio EPA format for reporting uranium. Since this does not account for the activity of the other uranium isotopes in the effluent, the total uranium data is also presented. The calculated total U-238 is based on a conversion factor of 337.84 applied to the measured value of total uranium.

(2) Average values presented are flow-weighted.

1272

EFFLUENT RADIATION REPORT

FACILITY: Feed Materials Production Center
 U.S. Department of Energy
 7400 Willey Road, P.O.Box 398704
 Cincinnati, Ohio 45239 Hamilton
 8502 M 8612 801002

LOCATION: 11000004605
 605 (001E) Bioreactor
 Tank 8/General Sump (Effluent to Sewage Treatment Plant)

DATE: MAY 1990

Day	Flow (MGD)	Total Alpha (pCi/l)	Total Beta (pCi/l)	Total U (mg/l)	Total U (kgs)	Calculated Total U-238 (pCi/l) (1)
1	0.000	0	0	0.00	0.00	0
2	0.000	0	0	0.00	0.00	0
3	0.000	0	0	0.00	0.00	0
4	0.000	0	0	0.00	0.00	0
5	0.000	0	0	0.00	0.00	0
6	0.000	0	0	0.00	0.00	0
7	0.000	0	0	0.00	0.00	0
8	0.000	0	0	0.00	0.00	0
9	0.000	0	0	0.00	0.00	0
10	0.000	0	0	0.00	0.00	0
11	0.000	0	0	0.00	0.00	0
12	0.000	0	0	0.00	0.00	0
13	0.000	0	0	0.00	0.00	0
14	0.000	0	0	0.00	0.00	0
15	0.000	0	0	0.00	0.00	0
16	0.000	0	0	0.00	0.00	0
17	0.000	0	0	0.00	0.00	0
18	0.000	0	0	0.00	0.00	0
19	0.000	0	0	0.00	0.00	0
20	0.000	0	0	0.00	0.00	0
21	0.000	0	0	0.00	0.00	0
22	0.000	0	0	0.00	0.00	0
23	0.000	0	0	0.00	0.00	0
24	0.000	0	0	0.00	0.00	0
25	0.000	0	0	0.00	0.00	0
26	0.000	0	0	0.00	0.00	0
27	0.000	0	0	0.00	0.00	0
28	0.000	0	0	0.00	0.00	0
29	0.000	0	0	0.00	0.00	0
30	0.000	0	0	0.00	0.00	0
31	0.000	0	0	0.00	0.00	0
Total	0.000			0.00	0.00	

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EFFLUENT RADIATION REPORT

FACILITY: Feed Materials Production Center
 U.S. Department of Energy
 7400 Willey Road, P.O.Box 398704
 Cincinnati, Ohio 45239 Hamilton
 9002 M 9501212

LOCATION: 1I000004606
 606 Stormwater Retention Basin
 Stormwater Retention Basin (Effluent to Manhole 175)

DATE: MAY 1990

Day	Flow (MGD)	Total U (mg/l)	Total U (kgs)	Calculated Total U-238 (pCi/l) (1)
1	0.382	0.54	0.78	182
2	0.387	0.60	0.88	203
3	0.375	0.54	0.77	182
4	0.352	0.64	0.85	216
5	0.095	0.36	0.13	122
6	0.277	0.38	0.40	128
7	0.503	0.44	0.84	149
8	0.507	0.60	1.15	203
9	0.539	0.46	0.94	155
10	0.353	0.50	0.67	169
11	0.268	0.62	0.63	209
12	0.269	0.70	0.71	236
13	0.222	0.58	0.49	196
14	0.358	0.48	0.65	162
15	0.401	0.42	0.64	142
16	0.374	0.50	0.71	169
17	0.295	0.56	0.62	189
18	0.417	0.50	0.79	169
19	0.313	0.48	0.57	162
20	0.435	0.48	0.79	162
21	0.493	0.56	1.04	189
22	0.488	0.54	1.00	182
23	0.837	0.46	1.46	155
24	0.819	0.52	1.61	176
25	0.807	0.50	1.53	169
26	0.838	0.54	1.71	182
27	0.830	0.54	1.70	182
28	0.830	0.58	1.82	196
29	0.820	0.58	1.80	196
30	0.818	0.52	1.61	176
31	0.828	0.56	1.75	189
Total	15.530		31.02	

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EFFLUENT RADIATION REPORT (cont.)

FACILITY: Feed Materials Production Center

LOCATION: 606 Stormwater Retention Basin

DATE: MAY 1990

	Flow (MGD)	Total U (mg/l)(2)	Total U (kgs)	Calculated Total U-238 (pCi/l)(1)(2)
Avg.	0.501	0.53	1.00	178
Max.	0.838	0.70	1.82	236
Min.	0.095	0.36	0.13	122

Comments: (1) The activity of this discharge has been and will continue to be reported as Uranium-238 (pCi/l) in accordance with the Ohio EPA format for reporting uranium. Since this does not account for the activity of the other uranium isotopes in the effluent, the total uranium data is also presented. The calculated total U-238 is based on a conversion factor of 337.84 applied to the measured value of total uranium.

(2) Average values presented are flow-weighted.

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EFFLUENT RADIATION REPORT

FACILITY: Feed Materials Production Center
 U.S. Department of Energy
 7400 Willey Road, P.O.Box 398704
 Cincinnati, Ohio 45239 Hamilton
 8502 M 8612 801002

LOCATION: 1I000004001
 001 Total Discharge
 Manhole 175 (Effluent to Great Miami River)

DATE: JUNE 1990

Day	Flow (MGD)	Total Alpha (pCi/l)	Total Beta (pCi/l)	Total U (mg/l)	Total U (kgs)	Calculated Total U-238 (pCi/l) (1)
1	0.986	324	131	0.58	2.16	196
2	1.028	252	144	0.60	2.33	203
3	0.913	455	95	0.86	2.97	291
4	0.955	360	167	0.52	1.88	176
5	0.951	347	90	0.58	2.09	196
6	0.423	54	212	0.10	0.16	34
7	0.707	261	122	0.40	1.07	135
8	0.851	482	239	0.86	2.77	291
9	1.011	419	347	0.80	3.06	270
10	1.077	941	532	2.10	8.56	709
11	1.038	1023	581	2.60	10.21	878
12	0.696	568	324	0.98	2.58	331
13	0.671	617	176	0.90	2.28	304
14	0.643	509	203	0.88	2.14	297
15	0.616	712	419	1.30	3.03	439
16	0.688	306	234	0.56	1.46	189
17	0.235	383	108	0.70	0.62	236
18	0.575	536	198	0.94	2.04	318
19	0.524	459	270	0.98	1.94	331
20	0.548	550	387	0.90	1.87	304
21	0.370	374	239	0.66	0.92	223
22	0.279	671	477	1.14	1.20	385
23	0.245	550	541	1.12	1.04	378
24	0.212	577	500	1.02	0.82	345
25	0.078	955	288	1.78	0.53	601
26	0.420	518	347	1.02	1.62	345
27	0.508	464	126	0.62	1.19	209
28	0.561	401	185	0.80	1.70	270
29	0.480	257	505	0.86	1.56	291
30	0.614	640	473	1.34	3.11	453
Total		18.903			68.92	

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EFFLUENT RADIATION REPORT (cont.)

FACILITY: Feed Materials Production Center

LOCATION: 001 Total Discharge

DATE: JUNE 1990

	Flow (MGD)	Total Alpha (pCi/l)(2)	Total Beta (pCi/l)(2)	Total U (mg/l)(2)	Total U (kgs)	Calculated Total U-238 (pCi/l)(1)(2)
Avg.	0.630	495	277	0.96	2.30	326
Max.	1.077	1023	581	2.60	10.21	878
Min.	0.078	54	90	0.10	0.16	34

The average uranium concentration for the previous twelve months was 0.79 mg/l. This is 88.8 percent of the Derived Concentration Guide(DOE Order 5400.5) for ingested water.

Comments: (1) The activity of this discharge has been and will continue to be reported as Uranium-238 (pCi/l) in accordance with the Ohio EPA format for reporting uranium. Since this does not account for the activity of the other uranium isotopes in the effluent, the total uranium data is also presented. The calculated total U-238 is based on a conversion factor of 337.84 applied to the measured value of total uranium.

(2) Average values presented are flow-weighted.

1272

EFFLUENT RADIATION REPORT

FACILITY: Feed Materials Production Center
U.S. Department of Energy
7400 Willey Road, P.O.Box 398704
Cincinnati, Ohio 45239 Hamilton
8502 M 8612 801002

LOCATION: 1I000004002
002 Discharge (Overflow) to Storm Sewer Outfall Ditch
Stormwater Retention Basin Spillway (Effluent to Paddy's Run)

DATE: JUNE 1990

There was no discharge to Paddy's Run from the Stormwater Retention Basin.

Based on 3.92 inches of rainfall for the month, the uranium discharge to Paddy's Run from uncontrolled areas of the FMPC is estimated to be 17.64 kgs.

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EFFLUENT RADIATION REPORT

FACILITY: Feed Materials Production Center
 U.S. Department of Energy
 7400 Willey Road, P.O.Box 398704
 Cincinnati, Ohio 45239 Hamilton
 8502 M 8612 801002

LOCATION: 1I000004601
 601 (001A) Sanitary Treatment Plant
 Ultraviolet Unit/Contact Tank (Effluent to Manhole 175)

DATE: JUNE 1990

Day	Flow (mgd)	Total U (mg/l)	Total U (kgs)	Calculated Total U-238 (pCi/l) (1)
1	0.096	0.18	0.07	61
2	0.099	0.14	0.05	47
3	0.900	0.14	0.48	47
4	0.028	0.12	0.01	41
5	0.086	0.18	0.06	61
6	0.087	0.18	0.06	61
7	0.160	0.12	0.07	41
8	0.146	0.14	0.08	47
9	0.116	0.15	0.07	51
10	0.039	0.19	0.03	64
11	0.022	0.17	0.01	57
12	0.129	0.22	0.11	74
13	0.100	0.15	0.06	51
14	0.099	0.09	0.03	30
15	0.086	0.04	0.01	14
16	0.180	0.04	0.03	14
17	0.005	0.03	0.00	10
18	0.024	0.04	0.00	14
19	0.039	0.05	0.01	17
20	0.120	0.11	0.05	37
21	0.097	0.06	0.02	20
22	0.079	0.03	0.01	10
23	0.115	0.04	0.02	14
24	0.021	0.04	0.00	14
25	0.020	0.04	0.00	14
26	0.049	0.03	0.01	10
27	0.043	0.08	0.01	27
28	0.043	0.07	0.01	24
29	0.017	0.07	0.00	24
30	0.056	0.06	0.01	20
Total	3.101		1.38	

EFFLUENT RADIATION REPORT (cont.)

FACILITY: Feed Materials Production Center

LOCATION: 601 (001A) Sanitary Treatment Plant

DATE: JUNE 1990

	Flow (MGD)	Total U (mg/l)(2)	Total U (kgs)	Calculated Total U-238 (pCi/l)(1)(2)
Avg.	0.103	0.12	0.05	40
Max.	0.900	0.22	0.48	74.32
Min.	0.005	0.03	0.00	10.14

Comments: (1) The activity of this discharge has been and will continue to be reported as Uranium-238 (pCi/l) in accordance with the Ohio EPA format for reporting uranium. Since this does not account for the activity of the other uranium isotopes in the effluent, the total uranium data is also presented. The calculated total U-238 is based on a conversion factor of 337.84 applied to the measured value of total uranium.

(2) Average values presented are flow-weighted.

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EFFLUENT RADIATION REPORT

FACILITY: Feed Materials Production Center
 U.S. Department of Energy
 7400 Willey Road, P.O.Box 398704
 Cincinnati, Ohio 45239 Hamilton
 8502 M 8612 801002

LOCATION: 1I000004603
 603 (001C) Clearwell
 Clearwell (Effluent to Manhole 175)

DATE: JUNE 1990

Day	Flow (mgd)	Total Alpha (pCi/l)	Total Beta (pCi/l)	Total U (mg/l)	Total U (kgs)	Calculated Total U-238 (pCi/l) (1)
1	0.000	0	0	0.00	0.00	0
2	0.000	0	0	0.00	0.00	0
3	0.000	0	0	0.00	0.00	0
4	0.000	0	0	0.00	0.00	0
5	0.000	0	0	0.00	0.00	0
6	0.000	0	0	0.00	0.00	0
7	0.000	0	0	0.00	0.00	0
8	0.000	0	0	0.00	0.00	0
9	0.153	2752	2203	7.44	4.31	2514
10	0.231	3545	2500	8.22	7.18	2777
11	0.231	3455	2721	8.24	7.20	2784
12	0.000	0	0	0.00	0.00	0
13	0.000	0	0	0.00	0.00	0
14	0.000	0	0	0.00	0.00	0
15	0.000	0	0	0.00	0.00	0
16	0.000	0	0	0.00	0.00	0
17	0.000	0	0	0.00	0.00	0
18	0.000	0	0	0.00	0.00	0
19	0.000	0	0	0.00	0.00	0
20	0.000	0	0	0.00	0.00	0
21	0.000	0	0	0.00	0.00	0
22	0.000	0	0	0.00	0.00	0
23	0.000	0	0	0.00	0.00	0
24	0.000	0	0	0.00	0.00	0
25	0.000	0	0	0.00	0.00	0
26	0.000	0	0	0.00	0.00	0
27	0.000	0	0	0.00	0.00	0
28	0.000	0	0	0.00	0.00	0
29	0.000	0	0	0.00	0.00	0
30	0.000	0	0	0.00	0.00	0
Total	0.615			18.69		

1272

EFFLUENT RADIATION REPORT (cont.)

FACILITY: Feed Materials Production Center

LOCATION: 603 (001C) Clearwell

DATE: JUNE 1990

	Flow (MGD)	Total Alpha (pCi/l)(2)	Total Beta (pCi/l)(2)	Total U (mg/l)(2)	Total U (kgs)	Calculated Total U-238 (pCi/l)(1)(2)
Avg.	0.205	3314	2509	8.03	6.23	2714
Max.	0.231	3545	2721	8.24	7.20	2784
Min.	0.153	2752	2203	7.44	4.31	2514

Comments: (1) The activity of this discharge has been and will continue to be reported as Uranium-238 (pCi/l) in accordance with the Ohio EPA format for reporting uranium. Since this does not account for the activity of the other uranium isotopes in the effluent, the total uranium data is also presented. The calculated total U-238 is based on a conversion factor of 337.84 applied to the measured value of total uranium.

(2) Average values presented are flow-weighted.

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EFFLUENT RADIATION REPORT

FACILITY: Feed Materials Production Center
 U.S. Department of Energy
 7400 Willey Road, P.O.Box 398704
 Cincinnati, Ohio 45239 Hamilton
 8502 M 8612 801002

LOCATION: 1I000004604
 604 (001D) Storm Sewer Lift Station
 Manhole 34 (Stormwater to Manhole 175)

DATE: JUNE 1990

Day	Flow (MGD)	Total U (mg/l)	Total U (kgs)	Calculated Total U-238 (pCi/l) (1)
1	0.000	0.00	0.00	0
2	0.000	0.00	0.00	0
3	0.000	0.00	0.00	0
4	0.000	0.00	0.00	0
5	0.000	0.00	0.00	0
6	0.000	0.00	0.00	0
7	0.000	0.00	0.00	0
8	0.000	0.00	0.00	0
9	0.000	0.00	0.00	0
10	0.000	0.00	0.00	0
11	0.000	0.00	0.00	0
12	0.000	0.00	0.00	0
13	0.055	1.80	0.37	608
14	0.021	1.50	0.12	507
15	0.035	1.42	0.19	480
16	0.020	0.34	0.03	115
17	0.081	1.26	0.39	426
18	0.020	1.24	0.09	419
19	0.048	0.88	0.16	297
20	0.052	0.70	0.14	236
21	0.020	1.14	0.09	385
22	0.064	1.32	0.32	446
23	0.000	0.00	0.00	0
24	0.056	1.28	0.27	432
25	0.023	1.22	0.11	412
26	0.020	0.74	0.06	250
27	0.020	1.28	0.10	432
28	0.020	1.44	0.11	486
29	0.020	1.32	0.10	446
30	0.020	1.36	0.10	459
Total	0.595		2.73	

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EFFLUENT RADIATION REPORT (cont.)

FACILITY: Feed Materials Production Center
 LOCATION: 604 (001D) Storm Sewer Lift Station
 DATE: JUNE 1990

	Flow (MGD)	Total U (mg/l)(2)	Total U (kgs)	Calculated Total U-238 (pCi/l)(1)(2)
Avg.	0.035	1.21	0.16	410
Max.	0.081	1.80	0.39	608
Min.	0.020	0.34	0.03	115

Comments: (1) The activity of this discharge has been and will continue to be reported as Uranium-238 (pCi/l) in accordance with the Ohio EPA format for reporting uranium. Since this does not account for the activity of the other uranium isotopes in the effluent, the total uranium data is also presented. The calculated total U-238 is based on a conversion factor of 337.84 applied to the measured value of total uranium.

(2) Average values presented are flow-weighted.

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EFFLUENT RADIATION REPORT

FACILITY: Feed Materials Production Center
 U.S. Department of Energy
 7400 Willey Road, P.O.Box 398704
 Cincinnati, Ohio 45239 Hamilton
 8502 M 8612 801002

LOCATION: 1I000004605
 605 (001E) Bioreactor
 Tank 8/General Sump (Effluent to Sewage Treatment Plant)

DATE: JUNE 1990

Day	Flow (MGD)	Total Alpha (pCi/l)	Total Beta (pCi/l)	Total U (mg/l)	Total U (kgs)	Calculated Total U-238 (pCi/l)
1	0.000	0	0	0.00	0.00	0
2	0.000	0	0	0.00	0.00	0
3	0.000	0	0	0.00	0.00	0
4	0.000	0	0	0.00	0.00	0
5	0.000	0	0	0.00	0.00	0
6	0.000	0	0	0.00	0.00	0
7	0.000	0	0	0.00	0.00	0
8	0.000	0	0	0.00	0.00	0
9	0.000	0	0	0.00	0.00	0
10	0.000	0	0	0.00	0.00	0
11	0.000	0	0	0.00	0.00	0
12	0.000	0	0	0.00	0.00	0
13	0.000	0	0	0.00	0.00	0
14	0.000	0	0	0.00	0.00	0
15	0.000	0	0	0.00	0.00	0
16	0.000	0	0	0.00	0.00	0
17	0.000	0	0	0.00	0.00	0
18	0.000	0	0	0.00	0.00	0
19	0.000	0	0	0.00	0.00	0
20	0.000	0	0	0.00	0.00	0
21	0.000	0	0	0.00	0.00	0
22	0.000	0	0	0.00	0.00	0
23	0.000	0	0	0.00	0.00	0
24	0.000	0	0	0.00	0.00	0
25	0.000	0	0	0.00	0.00	0
26	0.000	0	0	0.00	0.00	0
27	0.000	0	0	0.00	0.00	0
28	0.000	0	0	0.00	0.00	0
29	0.000	0	0	0.00	0.00	0
30	0.000	0	0	0.00	0.00	0
Total	0.000			0.00	0.00	

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EFFLUENT RADIATION REPORT

FACILITY: Feed Materials Production Center
 U.S. Department of Energy
 7400 Willey Road, P.O.Box 398704
 Cincinnati, Ohio 45239 Hamilton
 9002 M 9501212

LOCATION: 1I000004606
 606 Stormwater Retention Basin
 Stormwater Retention Basin (Effluent to Manhole 175)

DATE: JUNE 1990

Day	Flow (MGD)	Total U (mg/l)	Total U (kgs)	Calculated Total U-238 (pCi/l) (1)
1	0.800	0.64	1.94	216
2	0.801	0.56	1.70	189
3	0.824	0.74	2.31	250
4	0.809	0.42	1.29	142
5	0.815	0.58	1.79	196
6	0.309	0.54	0.63	182
7	0.547	0.60	1.24	203
8	0.665	0.52	1.31	176
9	0.534	0.58	1.17	196
10	0.777	0.58	1.70	196
11	0.785	0.56	1.66	189
12	0.477	0.60	1.08	203
13	0.427	0.56	0.90	189
14	0.398	0.64	0.96	216
15	0.366	0.40	0.55	135
16	0.371	0.42	0.59	142
17	0.149	0.42	0.24	142
18	0.441	0.38	0.63	128
19	0.262	0.44	0.44	149
20	0.326	0.46	0.57	155
21	0.128	0.44	0.21	149
22	0.000	0.00	0.00	0
23	0.000	0.00	0.00	0
24	0.000	0.00	0.00	0
25	0.000	0.00	0.00	0
26	0.233	0.44	0.39	149
27	0.355	0.48	0.64	162
28	0.363	0.70	0.96	236
29	0.354	0.52	0.70	176
30	0.358	0.56	0.76	189
Total	12.674		26.36	

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EFFLUENT RADIATION REPORT (cont.)

FACILITY: Feed Materials Production Center

LOCATION: 606 Stormwater Retention Basin

DATE: JUNE 1990

	Flow (MGD)	Total U (mg/l)(2)	Total U (kgs)	Calculated Total U-238 (pCi/l)(1)(2)
Avg.	0.487	0.55	1.01	186
Max.	0.824	0.74	2.31	250
Min.	0.128	0.38	0.21	128

Comments: (1) The activity of this discharge has been and will continue to be reported as Uranium-238 (pCi/l) in accordance with the Ohio EPA format for reporting uranium. Since this does not account for the activity of the other uranium isotopes in the effluent, the total uranium data is also presented. The calculated total U-238 is based on a conversion factor of 337.84 applied to the measured value of total uranium.

(2) Average values presented are flow-weighted.

5002, H 9501 900212

MONTHLY REPORT FORM

NAME ADDRESS CITY COUNTY ZIP

U.S. DEPARTMENT OF ENERGY

STATION CODE

DATE MONTH YEAR

PAGE PRINTING DATE AND SET IN

1 OF 2 01/27/90 OH00095

ORIG-2

FEED MATERIALS PROD. CENTER SAMPLING STATION DESCRIPTION
 P.O. BOX 398705 001 MANHOLE 175, FINAL EFFLUENT BEFORE GREAT MIAMI
 FERNALD 45239 HAMILTON

NOTE THIS FORM MUST BE TYPED

ENTER 1 FOR CONTINUOUS 2 FOR COMPOSITE 3 FOR GRAB SAMPLE				REPORTING LAB				ANALYST			
1. ENTER FREQUENCY OF SAMPLING											
1.	3	3	1	3	2	3	2	2	998	1	398
2.	6	6	999	1	998	1	998	998	998	1	398
1.	PH (MAX) S.U. REPORTING CODE	PH (MIN) S.U. REPORTING CODE	CONDUI FLOW MGD REPORTING CODE	DISS. OXYGEN MG/L REPORTING CODE	RESIDU T. NFL MG/L REPORTING CODE	O&G TOTAL MG/L REPORTING CODE	AMMONI NH3-N MG/L REPORTING CODE	NITRAT NO3-N MG/L REPORTING CODE	CYANID CN MG/L REPORTING CODE	FLUORI F, TOT MG/L REPORTING CODE	
2.	00401	00402	50050	00300	00530	00550	00610	00620	00720	00951	
3.	8.3	8.0	0.435								
4.	8.3	7.8	0.331								
5.	8.1	8.0	0.449								
6.	8.0	7.8	0.329	9.2							
7.	8.0	7.9	0.303								
8.	8.1	7.8	0.275								
9.	8.1	7.9	0.344								
10.	8.2	7.9	0.297								
11.	8.0	7.9	0.281	9.9	AA	AA	0.28	6.7	AA	0.8	
12.	7.9	7.6	0.285								
13.	8.5	7.8	0.991	10.1							
14.	9.0	8.0	0.951								
15.	9.0	8.9	0.953								
16.	9.4	7.7	0.652								
17.	9.5	7.9	0.881								
18.	9.0	8.1	0.574								
19.	8.0	7.5	0.332	13.0	3	AA	0.18	6.6	AA	0.6	
20.	8.0	7.6	0.607								
21.	8.2	7.8	0.643								
22.	8.4	7.5	0.589								
23.	8.7	7.5	0.627								
24.	8.7	7.8	0.639								
25.	8.7	8.0	0.644								
26.	8.8	7.9	0.702								
27.	8.2	7.7	0.766	11.5	4	AA	0.21	3.0	AA	0.6	
28.	8.3	7.7	0.773								
29.	8.4	7.7	0.826								
30.	8.0	7.8	0.570								
31.	AH	AH	AH								
	8.0	7.6	0.453								
TOTAL	N/A	N/A	16.502	53.7	11.0	AA	0.78	24.5	AA	3.3	
Avg.	N/A	N/A	0.550	10.7	2.7	AA	0.20	5.2	AA	0.6	
Max.	9.5	8.9	0.991	13.0	4	AA	0.28	8.2	AA	0.8	
Min.	7.9	7.5	0.000	9.2	AA	AA	0.11	3.0	AA	0.6	

ADDITIONAL REMARKS (AH REPORTING CODES MUST BE EXPLAINED IN THIS SECTION)

IR/ME
5/14/PAH - NO FLOW DUE TO PNEUMATIC TESTING OF DISCHARGE LINE

47

DISTRIBUTION
 WHITE - AGENCY
 YELLOW - AGENCY
 GREEN - REPORTER

I CERTIFY UNDER THE PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED AND BASED ON MY KNOWLEDGE THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT.

DATE REPORT COMPLETED	SIGNATURE OF REPORTER	TITLE OF REPORTER
11/14/90		DOE FMPC SITE MANAGER

9002 M 9501 900212

MONTHLY REPORT FORM

ORNL

WE ADDRESS CITY COUNTY ZIP

STATION CODE

DATE MONTH YEAR

PAGE PRINTING DATE APPLICATION NO.

U.S. DEPARTMENT OF ENERGY

11000004001

APR 1990

202 03/26/90 OH000956

FEED MATERIALS PROD. CENTER SAMPLING STATION DESCRIPTION
 P.O. BOX 398705 001 MANHOLE 175, FINAL EFFLUENT BEFORE GREAT MIAMI
 FERNALD 45239 HAMILTON

NOTE THIS FORM MUST BE TYPED

ENTER 1 FOR CONTINUOUS 2 FOR COMPOSITE 3 FOR GRAB SAMPLE		REPORTING LAB					ANALYST		
ENTER FREQUENCY OF SAMPLING		2	2	2	2	2	2	2	2
1	2	998	998	998	998	998	998	998	998
2	CHROM CR, TOT UG/L REPORTING CODE 01034	COPPER CU, TOT UG/L REPORTING CODE 01042	LEAD PB, TOT UG/L REPORTING CODE 01051	NICKEL NI, TOT UG/L REPORTING CODE 01067	SILVER AG, TOT UG/L REPORTING CODE 01077	CHROMI HEX-DS UG/L REPORTING CODE 01220	CB-80D 5 DAY MG/L REPORTING CODE 80082		
3									
4									
5									
6									
7	2.0	AA	AA	7.5	AA	AA	4.6		
8									
9									
10									
11									
12									
13									
14									
15	AA	AA	AA	AA	2.9	AA			
16									
17									
18									
19									
20									
21									
22									
23									
24									
25	10.7	4.6	7.2	17.0	AA	1.6			
26									
27									
28									
29									
30									
31									
STAL	17.4	23.5	21.4	34.2	5.9	5.8	7.7		
AVG	4.0	6.8	6.7	8.3	1.3	1.7	1.5		
MAX	10.7	9.1	10.0	17.0	2.9	2.2	4.6		
MIN	AA	AA	AA	AA	AA	AA	0.6		

OPTIONAL REMARKS (AM REPORTING CODES MUST BE EXPLAINED IN THIS SECTION)

*IR MED
5/14/90*

48

DISTRIBUTION
WHITE - AGENCY
YELLOW - AGENCY
GREEN - REPORTER

I CERTIFY UNDER THE PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED AND BASED ON MY KNOWLEDGE THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT.

DATE REPORT COMPLETED	SIGNATURE OF REPORTER	TITLE OF REPORTER	DOE	EMPC	SITE MANAGER

9002 M 9501 900212

MONTHLY REPORT FORM

LINE ADDRESS CITY COUNTY ZIP

U.S. DEPARTMENT OF ENERGY

STATION CODE

DATE/MONTH/YEAR

PAGE

PRINTING DATE APPLICATION NO.

102 03/24/90 OH003955

1272

FEED MATERIALS PROD. CENTER

SAMPLING STATION DESCRIPTION

P.O. BOX 398705

002 SPILLWAY FROM STORMWATER RETENTION BASIN

FERNALD

45239 HAMILTON

NOTE THIS FORM MUST BE TYPE

ENTER 1 FOR CONTINUOUS, 2 FOR COMPOSITE & 3 FOR GRAB SAMPLE				REPORTING LAB				ANALYST						
ENTER FREQUENCY OF SAMPLING				1	2	3	4	1	2	3	4	1	2	3
1	2	3	2											
2	1	4	1											
3	4	1	4											
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														
25														
26														
27														
28														
29														
30														
31														

OTAL

AVG.

MAX

MIN

ITIONAL REMARKS (AH REPORTING CODES MUST BE EXPLAINED IN THIS SECTION)

JLMD 6/11/90

AH - NO WATER OVERFLOWED FROM STORMWATER RETENTION BASIN

49

DISTRIBUTION
WHITE - AGENCY
YELLOW - AGENCY
GREEN - REPORTER

I CERTIFY UNDER THE PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED AND BASED ON MY KNOWLEDGE THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT

DATE REPORT COMPLETED

SIGNATURE OF REPORTER

TITLE OF REPORTER

5/10/90

DOE FMPC SITE MANAGER

3002 M 9501 900212

MONTHLY REPORT FORM

M.F. ADDRESS CITY, COUNTY ZIP

U.S. DEPARTMENT OF ENERGY

REPORTED

STATION CODE

DATE/MONTH/YEAR

11000004002 APR 1990

PAGE PRINTING DATE AFFILIATION

202 03/24/90 OH000950

1272

FEED MATERIALS PROD. CENTER

SAMPLING STATION DESCRIPTION

P.O. BOX 398705

002 SPILLWAY FROM STORMWATER RETENTION BASIN

FERNALD

45239 HAMILTON

ENTER 1 FOR CONTINUOUS 2 FOR COMPOSITE 3 FOR GRAB SAMPLE
ENTER FREQUENCY OF SAMPLING

REPORTING LAB

NOTE THIS FORM MUST BE TYPE

2	2										
4	4										
CHROMI	CONDUI										
HEX-DS	FLOW										
UG/L	MGD										
REPORTING CODE											
Y	01220	50050									
21		AH									
22											
23											
24											
25											
26											
27											
28											
29											
30											
31											

TAL											
VG											
AX											
JIN.											

OPTIONAL REMARKS (AH REPORTING CODES MUST BE EXPLAINED IN THIS SECTION)

1272 5/11/90

AH - NO WATER OVERFLOWED FROM STORMWATER RETENTION BASIN

50

DISTRIBUTION
WHITE - AGENCY
FELLOW - AGENCY
GREEN - REPORTER

I CERTIFY UNDER THE PENALTY OF PERJURY THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED AND BASED ON MY KNOWLEDGE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION. I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT.

DATE REPORT COMPLETED

SIGNATURE OF REPORTER

TITLE OF REPORTER

DOE FMPC SITE MANAGER

9002 M 9004 900212

MONTHLY REPORT FORM

LINE ADDRESS CITY COUNTY ZIP

U.S. DEPARTMENT OF ENERGY

STATION CODE

DATE MONTH YEAR

PAGE PRINTING DATE APPLICATION NO.

1 03/24/90 OH00095:

1272

FEED MATERIALS PROD. CENTER SAMPLING STATION DESCRIPTION

P.O. BOX 398705

601 SEWAGE TREATMENT PLANT EFFLUENT AFTER DISINFEC

FERNALD

45239 HAMILTON

NOTE THIS FORM MUST BE TYPE

1 ENTER 1 FOR CONC 2 FOR COMPOSITE 3 FOR GRAB SAMPLE				REPORTING LAB				ANALYST		
2 ENTER FREQUENCY OF SAMPLING										
1	2	2	2	2	2	2	2	2	2	2
2	999	6	6	6	6	6	6	6	6	6
Y	CONDUI FLOW MGD REPORTING CODE	BOD 5 DAY MG/L REPORTING CODE	RESIDU T. NFL MG/L REPORTING CODE	AMMONI NH3-N MG/L REPORTING CODE	FLUORI F, TOT MG/L REPORTING CODE	CHROM CR, TOT UG/L REPORTING CODE	COPPER CU, TOT UG/L REPORTING CODE	NICKEL NI, TOT UG/L REPORTING CODE	pH (MAX) S.U. REPORTING CODE	pH (MIN) S.U. REPORTING CODE
1	50050	00310	00530	00610	00951	01034	01042	01067	00401	00402
2	0.183								8.3	8.1
3	0.177								8.3	8.3
4	0.158								8.1	8.1
5	0.101	4.6	3	0.30	1.3	AA	AA	AA	8.0	8.0
6	0.086								8.0	7.9
7	0.080								8.0	7.8
8	0.104								8.0	7.9
9	0.116								8.0	7.8
10	0.103		AA	0.15	0.7	5.0	8.4	9.8	8.0	7.8
11	0.118		2		0.7				7.9	7.7
12	0.205	3.2	2						8.4	7.8
13	0.111								8.0	7.6
14	0.103								8.2	7.7
15	0.025								8.1	7.4
16	0.069								8.3	7.9
17	0.196								8.4	7.6
18	0.082		3	0.39	0.7	AA	9.1	12.8	8.4	7.9
19	0.096	2.6	8.6						8.2	8.0
20	0.102								8.1	7.9
21	0.094								8.1	8.0
22	0.115								8.6	7.9
23	0.163								8.7	7.7
24	0.276								8.5	8.0
25	0.085								8.2	8.0
26	0.122	4.1	6	0.20	0.6	2.4	14.8	9.2	8.1	7.8
27	0.088								8.2	7.9
28	0.081								8.1	7.8
29	0.131								7.9	7.8
30	AH								AH	AH
31	0.034								8.1	8.0
STAL	3.404	14.5	26.6	1.04	4.0	10.9	37.2	34.6	N/A	N/A
AVG	0.113	3.57	3.58	0.25	0.78	2.80	9.77	8.71	N/A	N/A
MAX	0.276	4.6	8.6	0.39	1.3	5.0	14.8	12.8	8.7	8.3
MIN	0.000	2.6	AA	0.15	0.6	AA	AA	AA	7.9	7.4

OPTIONAL REMARKS (AH REPORTING CODES MUST BE EXPLAINED IN THIS SECTION)

5/11/90 AH - NO FLOW DUE TO PNEUMATIC TESTING OF DISCHARGE LINE

51

DISTRIBUTION
WHITE - AGENCY
YELLOW - AGENCY
GREEN - REPORTER

I CERTIFY UNDER THE PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED AND BASED ON MY KNOWLEDGE THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION. I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT.

DATE REPORT COMPLETED SIGNATURE OF REPORTER TITLE OF REPORTER
10/24/90 DOE FMPC SITE MANAGER

9002 M 9501 900212

MONTHLY RPTCRT FORM

NAME, ADDRESS CITY COUNTY Z.P.

STATION CODE

DATE MONTH YEAR

PAGE PRINTING DATE APPROVED

U.S. DEPARTMENT OF ENERGY

11000004602 APR 1990

1st 03/24/90 OH00095

1272

FEED MATERIALS PROD. CENTER SAMPLING STATION DESCRIPTION

P.O. BOX 398705

602 GENERAL SUMP, EFFLUENT DIRECTED TO MANHOLE 17

FERNALD

45239 HAMILTON

NOTE THIS FORM MUST BE FILED

ENTER 1 FOR CONTINUOUS 2 FOR COMPOSITE 3 FOR GRAB SAMPLE			REPORTING LAB			ANALYST		
ENTER FREQUENCY OF SAMPLING								
1	3	2	2	2	2			
2	999	1	1	1	1			
CONDUIT FLOW MGD	PH	CHROM CR, TOT UG/L	COPPER CU, TOT UG/L	NICKEL NI, TOT UG/L	CHROMI HEX-DS UG/L			
REPORTING CODE	REPORTING CODE	REPORTING CODE	REPORTING CODE	REPORTING CODE	REPORTING CODE	REPORTING CODE	REPORTING CODE	REPORTING CODE
AY	50050	00400	01034	01042	01067	01220		
01	0.068							
02	0.000							
03	0.092							
04	0.068							
05	0.040	7.2	1.8	AA	AA	AA		
06	0.028							
07	0.068							
08	0.038							
09	0.028	7.1	2.9	AA	AA	AA		
10	0.038							
11	0.066							
12	0.066							
13	0.028							
14	0.038							
15	0.068							
16	0.000							
17	0.067	8.6	8.3	18.0	10.8	AA		
18	0.096							
19	0.066							
20	0.038							
21	0.090							
22	0.068							
23	0.028							
24	0.068							
25	0.040	7.4	2.0	4.4	1.6	AA		
26	0.028							
27	0.068							
28	0.068							
29	0.000							
30	0.040							
31								
OTAL	1.499	N/A	15.0	32.2	18.0	AA		
AVG.	0.050	N/A	4.5	9.8	5.6	AA		
MAX	0.096	8.6	8.3	18.0	10.8	AA		
MIN	0.000	7.1	2.0	AA	AA	AA		

ADDITIONAL REMARKS (AH REPORTING CODES MUST BE EXPLAINED IN THIS SECTION)

JRM/SD
5/14/90

52

DISTRIBUTION
WHITE - AGENCY
YELLOW - AGENCY
GREEN - REPORTER

I CERTIFY UNDER THE PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED AND BASED ON MY KNOWLEDGE THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT.

DATE REPORT COMPLETED

SIGNATURE OF REPORTER

TITLE OF REPORTER

5/14/90

DOE EMPC SITE MANAGER

9002, M 9501 900212

MONTHLY REPORT FORM

NAME ADDRESS CITY COUNTY ZIP

U.S. DEPARTMENT OF ENERGY

STATION CODE

REPORT DATE

11000004605 APR 1990

PAGE PRINTING DATE APPLICATION NO.

1 OF 2 03/26/90 OH00095

1272

FEED MATERIALS PROD. CENTER SAMPLING STATION DESCRIPTION

P.O. BOX 398705 605 EFFLUENT FROM BIODETRIFICATION DISC VIA 175
FERNALD 45239 HAMILTON

NOTE THIS FORM MUST BE TYPED

1. ENTER 1 FOR CONTINUOUS 2 FOR COMPOSITE 3 FOR GRAB SAMPLE
 2. ENTER FREQUENCY OF SAMPLING

REPORTING LAB

ANALYST

11.	2	2	1	2	2	2	2	2	2	2	2
12.	1	1	999	1	1	1	1	1	1	1	1
PH (MAX) S.U. REPORTING CODE	PH (MIN) S.U. REPORTING CODE	CONDUI FLOW MGD REPORTING CODE	BOD 5 DAY MG/L REPORTING CODE	RESIDU T. NFL MG/L REPORTING CODE	AMMONI NH3-N MG/L REPORTING CODE	NITRAT NO3-N MG/L REPORTING CODE	FLUORI F,TOT MG/L REPORTING CODE	CHROM CR,TOT UG/L REPORTING CODE	COPPER CU,TOT UG/L REPORTING CODE		
AY	00401	00402	50050	00310	00530	00610	00620	00951	01034	01042	
1	7.8	7.8	0.094								
2	7.8	7.8	0.094								
3	8.1	8.1	0.037								
4	8.2	8.2	0.030								
5			AH								
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											
26											
27											
28											
29											
30											
31											

STAL	N/A	N/A	0.255								
Avg.	N/A	N/A	0.064								
Max.	8.2	8.2	0.094								
Min	7.8	7.8	0.030								

ADDITIONAL REMARKS (AH REPORTING CODES MUST BE EXPLAINED IN THIS SECTION)

4/11/90 AH - FACILITY TAKEN OUT OF SERVICE, 4/04/90, DUE TO CONSTRUCTION ACTIVITIES

54

DISTRIBUTION
WHITE - AGENCY
YELLOW - AGENCY
GREEN - REPORTER

I CERTIFY UNDER THE PENALTY OF PERJURY THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED AND BASED ON MY KNOWLEDGE THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION. I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT.

DATE REPORT COMPLETED	SIGNATURE OF REPORTER	TITLE OF REPORTER
4/11/90		DOE FMPC SITE MANAGER

9002 H 9501 900212
MONTHLY REPORT FORM

MAIL ADDRESS CITY COUNTY ZIP

U.S. DEPARTMENT OF ENERGY

STATION CODE

REPORTED
DATE MONTH YEAR

PAGE PRINTING DATE APPROVAL BY

1I000004605 APR 1990

2 OF 2 03/24/90 OH00095

1272

FEED MATERIALS PROD. CENTER SAMPLING STATION DESCRIPTION

P.O. BOX 398705 605 EFFLUENT FROM BIODETRIFICATION DISC VIA 175
FERNALD 45239 HAMILTON

NOTE THIS FORM MUST BE TYPE

1. ENTER 1 FOR CONTINUOUS 2 FOR COMPOSITE 3 FOR GRAB SAMPLE		REPORTING LAB				ANALYST			
2. ENTER FREQUENCY OF SAMPLING		1	1	1	1	1	1	1	1
1.	NICKEL NI, TOT UG/L REPORTING CODE	CHROMI HEX-DS UG/L REPORTING CODE	REPORTING CODE						
2.	01067	01220							
3.									
4.									
5.	AH								
6.									
7.									
8.									
9.									
10.									
11.									
12.									
13.									
14.									
15.									
16.									
17.									
18.									
19.									
20.									
21.									
22.									
23.									
24.									
25.									
26.									
27.									
28.									
29.									
30.									
31.									

STAL									
AVG									
MAX									
MIN									

OPTIONAL REMARKS (AH REPORTING CODES MUST BE EXPLAINED IN THIS SECTION)

EMD 1/10/90 AH - FACILITY TAKEN OUT OF SERVICE 4/04/90, DUE TO CONSTRUCTION ACTIVITIES.

55

DISTRIBUTION
WHITE - AGENCY
YELLOW - AGENCY
GREEN - REPORTER

I CERTIFY UNDER THE PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED AND BASED ON MY KNOWLEDGE THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION BELIEVE THE SUBMITTED INFORMATION IS TRUE ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT.

DATE REPORT COMPLETED

SIGNATURE OF REPORTER

5/10/90

TITLE OF REPORTER

DOE FMPC

SITE MANAGER

5002 M 9501 5-0212

MONTHLY REPORT FORM

NAME ADDRESS CITY COUNTY ZIP

U.S. DEPARTMENT OF ENERGY

REPORTED

DATE MONTH YEAR

PAGE PRINTING DATE APPROVAL

OHIO EPA

FEED MATERIALS PROD. CENTER
P.O. Box 398705
FERNALD, OH 45239 HAMILTON

STATION CODE

APR 1990

1 OF 1

03-24-90 OHC00956

SAMPLING STATION DESCRIPTION

606 STORMWATER RETENTION BASIN

1272

NOTE THIS FORM MUST BE FILED

1. ENTER 1 FOR CONTINUOUS 2 FOR COMPOSITE 3 FOR GRAB SAMPLE		REPORTING LAB				ANALYST			
2. ENTER FREQUENCY OF SAMPLING		1	2	3					
11	2	2	1	2					
12	6	6	999	6	1				
	pH (MAS)	pH (MIN)	CONDUI T. NFL	RESIDU T. NFL	O & G TOTAL				
	S.U. REPORTING CODE	S.U. REPORTING CODE	FLOW MGD	MG/L	MG/L				
AY	00401	00402	50050	00530	00550				
11	8.9	8.8	0.212	27	AA				
12	9.0	7.3	0.463	19	AA				
13	8.9	7.2	0.475	20	AA				
14	8.6	7.2	0.330	19	AA				
15	8.9	6.9	0.461	18	AA				
16	7.9	6.7	0.288	22	AA				
17									
18	8.0	7.2	0.193	8	AA				
19	8.8	7.6	0.260	9	AA				
20	8.8	7.4	0.248	6	AA				
21	8.4	7.8	0.267	6	AA				
22	8.8	8.5	0.280	3	AA				
23	8.8	8.5	0.223	2	AA				
24	8.5	8.1	0.362	3	AA				
25	8.3	8.0	0.395	3	AA				
26	8.5	8.1	0.467	4	AA				
27	9.0	8.3	0.479	5	AA				
28	8.2	7.5	0.317	7	AA				
29									
30	7.9	7.7	0.157	8	AA				
31									

TOTAL	N/A	N/A	5.877	189	AA				
AVG.	N/A	N/A	0.326	10.8	AA				
MAX.	9.0	8.8	0.479	27	AA				
MIN.	7.9	6.7	0.157	2	AA				

ADDITIONAL REMARKS (AM REPORTING CODES MUST BE EXPLAINED IN THIS SECTION)

X MRD
1/11/90

56

DISTRIBUTION
WHITE - AGENCY
YELLOW - AGENCY
GREEN - REPORTER
TELETYPE REPORTER

I CERTIFY UNDER THE PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED AND BASED ON MY KNOWLEDGE THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION. I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT.

DATE REPORT COMPLETED	SIGNATURE OF REPORTER	TITLE OF REPORTER
5/10/90		DOE FMPC SITE MANAGER

9002 M 9501 900212

MONTHLY REPORT FORM

NAME ADDRESS CITY COUNTY ZIP

U.S. DEPARTMENT OF ENERGY

STATION CODE

DATE MONTH

PAGE PRINTING DATE APPROVAL DATE

1052 03/24/90 OH00095

1272

FEED MATERIALS PROD. CENTER
P.O. BOX 398705
FERNALD

SAMPLING STATION DESCRIPTION

001 MANHOLE 175, FINAL EFFLUENT BEFORE GREAT MIAM

45239 HAMILTON

NOTE THIS FORM MUST BE TYPE

ENTER 1 FOR CONTINUOUS 2 FOR COMPOSITE 3 FOR GRAB SAMPLE				REPORTING LAB				ANALYST			
ENTER FREQUENCY OF SAMPLING				1	2	3	2	2	3	2	
1	1	1	3								
2	999	999	999	1	998	1	998	998	1	998	
PH (MAX) S.U. REPORTING CODE	PH (MIN) S.U. REPORTING CODE	CONDUI FLOW MGD REPORTING CODE	DISS. OXYGEN MG/L REPORTING CODE	RESIDU T. NFL MG/L REPORTING CODE	O&G TOTAL MG/L REPORTING CODE	AMMONI NH3-N MG/L REPORTING CODE	NITRAT NO3-N MG/L REPORTING CODE	CYANID CN MG/L REPORTING CODE	FLUORI F,TOT MG/L REPORTING CODE		
00401	00402	50050	00300	00530	00550	00610	00620	00720	00951		
8.1	7.6	0.820									
8.7	8.0	0.862									
8.9	8.5	0.742	11.1	5	AA	0.14	3.1	AA	0.7		
8.4	7.9	0.605									
8.8	8.2	1.065									
8.2	8.0	1.061									
8.3	8.1	1.039	10.0	4	AA	0.13	2.5	AA	0.8		
8.5	8.0	1.051									
9.1	8.2	0.684									
9.3	8.0	0.720									
9.3	7.8	0.647									
9.6	7.6	0.588									
9.5	7.8	0.582									
8.3	8.0	1.377									
9.4	7.5	0.917	9.9	5	AA	0.10	3.8	AA	0.7		
8.1	7.9	1.105									
8.2	8.0	1.368									
8.2	7.8	1.170									
8.6	7.9	1.323									
8.0	7.7	0.828									
8.7	7.8	0.760									
8.3	7.7	1.103									
8.3	7.9	1.112	9.1	3	AA	0.10	4.6	AA	0.8		
8.2	7.6	1.115									
8.0	7.5	0.995									
8.0	7.5	1.041									
8.0	7.8	0.988									
8.0	7.5	0.994									
8.6	7.6	1.069									
8.2	7.8	1.140									
8.3	8.1	1.208	9.3	AA	AA	0.06	2.4	AA	0.8		
TOTAL	N/A	N/A	30.079	49.4	19	AA	0.53	16.4	AA	3.1	
Avg.	N/A	N/A	0.970	9.8	3.6	AA	0.10	3.3	AA	0.1	
MAX	9.6	8.5	1.377	11.1	5	AA	0.14	4.6	AA	0.1	
MIN	8.0	7.5	0.582	9.1	AA	AA	0.06	2.4	AA	0.1	

ADDITIONAL REMARKS (All REPORTING CODES MUST BE EXPLAINED IN THIS SECTION)

FEB 6/15/90

57

DISTRIBUTION
WHITE - AGENCY
YELLOW - AGENCY
GREEN - REPORTER
FORM NO. EPA-4300, ESE

I CERTIFY UNDER THE PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED AND BASED ON MY KNOWLEDGE THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION. I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT.

DATE REPORT COMPLETED	SIGNATURE OF REPORTER	TITLE OF REPORTER
JUNE 13, 1990		DOE FMPC Site Manager

5002 M 9501 900212

MONTHLY REPORT FORM

NAME ADDRESS CITY COUNTY Z.P.

STATION CODE

DATE MONTH YR.

PAGE PRINTING DATE APPROX BY

ORIGINATOR

U.S. DEPARTMENT OF ENERGY

11000004001 MAY 1990

2C2 03/24/90 OH05095

1272

FEED MATERIALS PROD. CENTER SAMPLING STATION DESCRIPTION

P.O. BOX 398705

001 MANHOLE 175, FINAL EFFLUENT BEFORE GREAT MIAM

FERNALD

45239 HAMILTON

NOTE THIS FORM MUST BE TYPE

1. ENTER 1 FOR CONTINUOUS 2 FOR COMPOSITE 3 FOR GRAB SAMPLE				REPORTING LAB			ANALYST		
2. ENTER FREQUENCY OF SAMPLING									
1	2	2	2	2	2	2	2		
2	998	998	998	998	998	998	998		
3	CHROM CR, TOT UG/L REPORTING CODE	COPPER CU, TOT UG/L REPORTING CODE	LEAD PB, TOT UG/L REPORTING CODE	NICKEL NI, TOT UG/L REPORTING CODE	SILVER AG, TOT UG/L REPORTING CODE	CHROMI HEX-DS UG/L REPORTING CODE	CB-BOD 5 DAY MG/L REPORTING CODE		
4	01034	01042	01051	01067	01077	01220	80082		
5									
6									
7									
8									
9							0.9		
10									
11									
12									
13									
14									
15	5.7	8.7	5.5	7.0	AA	AA			
16							4.0		
17									
18									
19									
20									
21									
22									
23	2.1	9.7	11.5	11.3	AA	4.0	2.5		
24									
25									
26									
27									
28									
29									
30							1.8		
31	4.7	7.5	9.8	7.7	AA	2.8			
TOTAL	21.6	50.6	67.3	61.9	5.6	19.8	11.5		
Avg	5.3	9.9	12.6	12.6	1.1	3.7	2.4		
MAX	9.1	13.2	29.0	27.7	1.6	8.4	4.0		
MIN	2.1	7.5	5.5	7.0	AA	AA	0.9		

ADDITIONAL REMARKS (AM REPORTING CODES MUST BE EXPLAINED IN THIS SECTION)

AE - ANALYTICAL DATA NOT VALID

SUB915/90

58

DISTRIBUTION
WHITE - AGENCY
YELLOW - AGENCY
GREEN - REPORTER

I CERTIFY UNDER THE PENALTY OF PERJURY THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED AND BASED ON MY KNOWLEDGE THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION. I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT.

DATE REPORT COMPLETED	SIGNATURE OF REPORTER	TITLE OF REPORTER
JUNE 13, 1990		DOE FMPC SITE MANAGER

9002 M 9501 900212

MONTHLY REPORT FORM

MAIL ADDRESS CITY COUNTY ZIP

U.S. DEPARTMENT OF ENERGY

STATION CODE

DATE MONTH

PAGE

PRINTING DATE APPLICATION NO.

102 03/26/90 DH000951

1272

FEED MATERIALS PROD. CENTER
P.O. BOX 398705
FERNALD

SAMPLING STATION DESCRIPTION

002 SPILLWAY FROM STORMWATER RETENTION BASIN

45239 HAMILTON

NOTE THIS FORM MUST BE TYPED

ENTER 1 FOR CONTINUOUS 2 FOR COMPOSITE 3 FOR GRAB SAMPLE				REPORTING LAB				ANALYST			
ENTER FREQUENCY OF SAMPLING											
1	3	2	3	2	2	2	2	2	2	2	2
2	1	4	1	4	4	4	4	4	4	4	4
S.U.	PH	RESIDU T. NFL	O&G	AMMONI NH3-N	NITRAT NO3-N	FLUORI F,TOT	CHROM CR,TOT	COPPER CU,TOT	NICKEL NI,TOT	SILVER AG,TOT	
REPORTING CODE	REPORTING CODE	REPORTING CODE	REPORTING CODE	REPORTING CODE	REPORTING CODE	REPORTING CODE	REPORTING CODE	REPORTING CODE	REPORTING CODE	REPORTING CODE	
00400	00530	00550	00610	00620	00951	01034	01042	01067	01077		
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17	7.9	4	AA	AA	1.1	0.6	2.4	9.6	65.9	AA	
18	8.2	10	AA	AA	1.1	0.6	2.8	12.6	9.3	AA	
19											
20											
21											
22											
23											
24											
25											
26											
27											
28											
29											
30											
31											
TOTAL	N/A	14	AA	AA	2.2	1.2	5.2	22.2	75.2	AA	
Avg	N/A	4.1	AA	AA	1.1	0.6	2.4	9.6	65.0	AA	
MAX	8.2	10	AA	AA	1.1	0.6	2.8	12.6	65.9	AA	
MIN	7.9	4	AA	AA	1.1	0.6	2.4	9.6	9.3	AA	

OPTIONAL REMARKS (AM REPORTING CODES MUST BE EXPLAINED IN THIS SECTION)

SUB 9/15/90

59

DISTRIBUTION
WHITE - AGENCY
YELLOW - AGENCY
GREEN - REPORTER
FORM NO. EPA-4270-94

CERTIFY UNDER THE PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED AND BASED ON MY KNOWLEDGE, THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I ALSO CERTIFY THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT.	
DATE REPORT COMPLETED JUNE 13, 1990	SIGNATURE OF REPORTER
TITLE OF REPORTER DOE FMPC SITE MANAGER	

9002.M 9501 900212

MONTHLY REPORT FORM

LINE ADDRESS CITY COUNTY ZIP

U.S. DEPARTMENT OF ENERGY

STATION CODE

DATE MONTH

PAGE PRINTING DATE APPLICATION

202 03/24/90 OH00095

1272

FEED MATERIALS PROD. CENTER SAMPLING STATION DESCRIPTION

P.O. BOX 398705 002 SPILLWAY FROM STORMWATER RETENTION BASIN
FERNALD 45239 HAMILTON

NOTE THIS FORM MUST BE TYPED

ENTER 1 FOR CONTINUOUS 2 FOR COMPOSITE 3 FOR GRAB SAMPLE		REPORTING LAB						ANALYST		
ENTER FREQUENCY OF SAMPLING										
1.	2									
2.	4									
3.	CHROMIUM	CONDUI								
4.	HEX-DS	FLOW								
5.	UG/L	MGD								
6.	REPORTING CODE									
7.	01220	50050								
8.										
9.										
10.										
11.										
12.										
13.										
14.										
15.										
16.										
17.	AE	0.608								
18.	AE	0.010								
19.										
20.										
21.										
22.										
23.										
24.										
25.										
26.										
27.										
28.										
29.										
30.										
31.										
OTAL		0.618								
Avg		0.309								
MAX		0.608								
MIN		0.010								

ADDITIONAL REMARKS (AM REPORTING CODES MUST BE EXPLAINED IN THIS SECTION)

AE - ANALYTICAL DATA NOT VALID

FWS 6/5/90

60

DISTRIBUTION
WHITE - AGENCY
YELLOW - AGENCY
GREEN - REPORTER

DATE REPORT COMPLETED	SIGNATURE OF REPORTER	TITLE OF REPORTER
JUNE 13 1990		DOE FMPC SITE MANAGER

I CERTIFY UNDER THE PENALTY OF PERJURY THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED AND BASED ON MY KNOWLEDGE AND THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT.

5005 3 9003 900212

ENTRANCE REPORT FORM

NAME ADDRESS CITY COUNTY ZIP

U.S. DEPARTMENT OF ENERGY

STATICS CODE

卷之三

PAGE PRINTING DATE APR 04 2014

198 03/24/90 OH00095:

2 THE CROWN

1272

FEED MATERIALS PROD. CENTER SAMPLING STATION DESCRIPTION

P. O. BOX 398705

FERNALD 45239 HAMILTON

601 SEWAGE TREATMENT PLANT EFFLUENT AFTER DISINFECTION

22

FERNALD

ENTER FREQUENCY OF SAMPLING				REPORTING LAB				ANALYST	
1 999	2 998	2 998	2 998	2 998	2 998	2 998	2 998	2 998	
CONDUI FLOW MGD REPORTING CODE	BOD 5 DAY MG/L REPORTING CODE	RESIDU T. NFL MG/L REPORTING CODE	AMMONI NH3-N MG/L REPORTING CODE	FLUORI F, TOT MG/L REPORTING CODE	CHROM CR, TOT UG/L REPORTING CODE	COPPER CU, TOT UG/L REPORTING CODE	NICKEL NI, TOT UG/L REPORTING CODE	FEC CO MF-FCB #/100M REPORTING CODE	
Y 50050	00310	00530	00610	00951	01034	01042	01067	31616	REPORTING CODE
1 0.111									
2 0.108	5.6	2.2							
3 0.049		3	0.23	0.5	1.8	9.6	AA	4	
4 0.090									
5 0.193									
6 0.113									
7 0.037		2	0.33	0.56	9.4	AA	AA	8	
8 0.078									
9 0.072	5.1	1.8							
10 0.068									
11 0.075									
12 0.079									
13 0.114									
14 0.076									
15 0.091		AA	0.19	0.6	AA	6.7	6.7	1500	
16 0.169	4.6	2.8							
17 0.236									
18 0.133									
19 0.119									
20 0.055									
21 0.019									
22 0.097									
23 0.073	1.1	AA	0.23	0.7	1.6	6.8	6.4	70	
24 0.080									
25 0.061									
26 0.081									
27 0.043									
28 0.037									
29 0.056									
30 0.091	2.9	1.6							
31 0.027		AA	0.50	0.6	2.6	7.8	3.0	90	
TOTAL	2.781	19.3	19.4	1.48	2.96	17.2	35.8	32.5	1672
Avg	0.090	4.1	2.2	0.29	0.6	2.8	7.2	6.2	50
Max	0.236	5.6	3	0.50	0.7	9.4	9.6	8.2	1500
Min	0.019	1.1	AA	0.19	0.5	AA	AA	AA	4

ITIONAL REMARKS (AN REPORTING CODES MUST BE EXPLAINED IN THIS SECTION)

Sub 6/15/90

61

CERTIFY UNDER THE PENALTY OF PERJURY THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED AND BASED ON MY KNOWLEDGE AND INFORMATION I AM IMMEDIATELY RESPONSIBLE FOR DETERMINING THE ACCURACY OF THE INFORMATION SUBMITTED. I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINES AND IMPRISONMENT.

DATE REPORT COMPLETED
JUNE 12 1990

SIGNATURE OF REPORTER

TITLE OF REPORTER

DOE FMPC SITE MANAGER

4205 M-8009-1-212
MONTHLY REPORT FORM

NAME ADDRESS CITY COUNTY ZIP

U. S. Department of Energy
FEED MATERIALS PRODUCTION CENTER
P. O. Box 398705
Fernald 45239 Hamilton

STATION CODE

DATE MONTH

PAGE PRINTING DATE AND TIME

11000004601

May 1990

2 OF 2 3/29/90 CHOICED

1272

SAMPLING STATION DESCRIPTION

601 SEWAGE TREATMENT PLANT EFFLUENT

NOTE THIS FORM MUST BE FILED

1. ENTER 1 FOR CONTINUOUS 2 FOR COMPOSITE 3 FOR SPOT SAMPLE		REPORTING LAB				ANALYST			
2. ENTER FREQUENCY OF SAMPLING		REPORTING CODE	REPORTING CODE	REPORTING CODE	REPORTING CODE	REPORTING CODE	REPORTING CODE	REPORTING CODE	REPORTING CODE
1.	1								
2.	999	999							
	pH (max) S.U.	pH (min) S.U.							
DAY									
01	8.2	8.0							
02	8.0	7.6							
03	8.0	7.8							
04	8.1	7.6							
05	8.2	8.1							
06	8.1	8.0							
07	8.2	7.8							
08	8.3	8.0							
09	8.2	7.9							
10	8.1	7.8							
11	8.0	7.7							
12	7.8	7.6							
13	8.0	7.5							
14	8.0	7.8							
15	7.8	7.7							
16	8.0	7.6							
17	8.0	7.8							
18	8.2	8.0							
19	8.2	7.9							
20	8.3	8.0							
21	8.2	7.8							
22	8.1	7.9							
23	8.0	7.7							
24	7.7	7.6							
25	7.7	7.5							
26	8.0	7.6							
27	7.7	7.3							
28	7.7	7.5							
29	7.8	7.6							
30	7.9	7.7							
31	7.8	7.7							
TOTAL	N/A	N/A							
Avg.	N/A	N/A							
MAX	8.3	8.1							
MIN	7.7	7.3							

ADDITIONAL REMARKS - REPORTING CODES MUST BE EXPLAINED IN THIS SECTION.

8/15/90

62

DISTRIBUTION
WHITE - AGENCY
YELLOW - AGENCY
GREEN - REPORTER
FORM NO. EPA-4400-002

I CERTIFY UNDER THE PENALTY OF PERJURY THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED AND BASED ON MY KNOWLEDGE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR DETERMINING THE INFORMATION. I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT.

DATE REPORT COMPLETED	SIGNATURE OF REPORTER	TITLE OF REPORTER
JUNE 13, 1990		DOE FMPC SITE MANAGER

9002 M 9501 900212

MONTHLY REPORT FORM

AMT ADDRESS CITY COUNTY ZIP

U.S. DEPARTMENT OF ENERGY

STATION CODE

DATE/MONTH

PAGE PRINTING DATE APPROVED

1I000004602 MAY 1990

1CP1 03/27/90 CH00095

FEED MATERIALS PROD. CENTER

SAMPLING STATION DESCRIPTION

P.O. BOX 398705

602 GENERAL SUMP, EFFLUENT DIRECTED TO MANHOLE 17

FERNALD

45239 HAMILTON

NOTE THIS FORM MUST BE TYPE

1 ENTER 1 FOR CONTINUOUS 2 FOR COMPOSITE 3 FOR GRAB SAMPLE			REPORTING LAB			ANALYST		
2 ENTER FREQUENCY OF SAMPLING								
1	1	3	2	2	2			
2	999	1	1	1	1			
3	CONDUIT FLOW MGD	PH S.U.	CHROM CR, TOT UG/L	COPPER CU, TOT UG/L	NICKEL NI, TOT UG/L	CHROMI HEX-OS UG/L		
4Y	REPORTING CODE	REPORTING CODE	REPORTING CODE	REPORTING CODE	REPORTING CODE	REPORTING CODE	REPORTING CODE	REPORTING CODE
5	50050	00400	01034	01042	01067	01220		
6	0.096							
7	0.136							
8	0.040	8.3	AA	5.3	AA	AA		
9	0.028							
10	0.156							
11	0.068							
12	0.028	8.0	103	14.9	46.2	AA		
13	0.040							
14	AH							
15	0.078							
16	0.090							
17	0.090							
18	0.136							
19	0.068							
20	0.068							
21	0.073							
22	0.068							
23	0.073	6.8	2.3	4.5	2.9	AA		
24	0.068							
25	0.128							
26	0.090							
27	0.090							
28	0.078							
29	0.090							
30	0.128							
31	0.128	8.7	4.1	22.2	4.5	5.0		
32	0.078							
33	0.090							
34	0.128							
35	0.068							
36	0.128							
37	0.128							
38	0.128							
39	0.128							
40	0.128							
41	0.128							
42	0.128							
43	0.128							
44	0.128							
45	0.128							
46	0.128							
47	0.128							
48	0.128							
49	0.128							
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104	0.128							
105	0.128							
106	0.128							
107	0.128							
108	0.128							
109	0.128							
110	0.128							
111	0.128							
112	0.128							
113	0.128							
114	0.128							
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138	0.128							
139	0.128							
140	0.128							
141	0.128							
142	0.128							
143	0.128							
144	0.128							
145	0.128							
146	0.128							
147	0.128							
148	0.128							
149	0.128							
150	0.128							
151	0.128							
152	0.128							
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194	0.128							
195	0.128							
196	0.128							
197	0.128							
19								

9002 H 9501 900212

MONTHLY REPORT FORM

NAME ADDRESS CITY COUNTY ZIP

STATION CODE

DATE MONTH

PAGE PRINTING DATE APPROVED

U.S. DEPARTMENT OF ENERGY

11000004604 MAY 1990

101 03/24/90 OH00095

1272

FEED MATERIALS PROD. CENTER

SAMPLING STATION DESCRIPTION

P.O. BOX 398705

604 STORM SEWER LIFT STATION EFFLUENT MANHOLE 171

FERNALD

45239 HAMILTON

NOTE THIS FORM MUST BE

1. ENTER 1 FOR CONTINUOUS 2 FOR COMPOSITE 3 FOR GRADE SAMPLE				REPORTING LAB				ANALYST		
1.2. ENTER FREQUENCY OF SAMPLING										
"	2	2	1	2	3	2	2			
"	6	6	999	998	1	995	998			
	PH (MAX) S.U. REPORTING CODE	PH (MIN) S.U. REPORTING CODE	CONDUI FLOW MGD REPORTING CODE	RESIDU T. NFL MG/L REPORTING CODE	O&G TOTAL MG/L REPORTING CODE	NITRAT NO3-N MG/L REPORTING CODE	FLUORI F,TOT MG/L REPORTING CODE			
DAY	00401	00402	50050	00530	00550	00620	00951			
01	8.4	7.9	0.064							
02	8.4	7.8	0.061							
03	8.9	7.9	0.075	5	AA	4.4	1.0			
04	8.5	7.8	0.014							
05	9.0	8.1	0.267							
06	8.1	8.0	0.214							
07	8.2	8.0	0.124	3	AA	4.0	1.27			
08	8.2	8.0	0.089							
09	8.4	8.0	0.073							
10	8.5	8.0	0.039							
11	8.0	7.9	0.081							
12	8.5	8.2	0.070							
13		AH								
14	8.1	7.8	0.129							
15	8.0	7.9	0.114	11	AA	3.5	0.9			
16	8.0	7.8	0.344							
17	8.1	7.5	0.407							
18	8.0	7.5	0.403							
19	8.0	7.5	0.263							
20	8.0	7.5	0.151							
21	8.2	7.9	0.245							
22	8.5	7.9	0.104							
23	8.1	7.4	0.049	8	AA	4.1	1.0			
24	8.0	7.4	0.016							
25		AH								
26		AH								
27		AH								
28		AH								
29		AH								
30		AH								
31		AH								
TOTAL	N/A	N/A	3.396	27	AA	16.0	4.17			
AVG.	N/A	N/A	0.148	6.6	AA	3.9	1.1			
MAX.	9.0	8.2	0.407	11	AA	4.4	1.27			
MIN.	8.0	7.4	0.014	3	AA	3.5	0.9			

ADDITIONAL REMARKS (AH REPORTING CODES MUST BE EXPLAINED IN THIS SECTION)

AH-No Flow, Discharge Pumps Shut Off

64

8/26/90

DISTRIBUTION
WHITE - AGENCY
YELLOW - AGENCY
GREEN - REPORTER

CERTIFY UNDER THE PENALTY OF PERJURY THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED AND BASED ON MY KNOWLEDGE THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT.

DATE REPORT COMPLETED	SIGNATURE OF REPORTER	TITLE OF REPORTER
JUNE 13, 1990		DOOE FMPC SITE MANAGER

9002 M 9501 900212

MONTHLY REPORT FORM

NAME ADDRESS CITY COUNTY ZIP

REFUGED

PAGE PRINTING DATE APPROX.

U.S. DEPARTMENT OF ENERGY

STATION CODE

DATE MONTH

102 03/1990 OH03095

ORNL DA
1272FEED MATERIALS PROD. CENTER
P.O. BOX 398705
FERNALD

11000004605 MAY 1990

605 EFFLUENT FROM BIODETRIFICATION DISC VIA 175

45239 HAMILTON

NOTE THIS FORM MUST BE TYPED

ENTER 1 FOR CONTINUOUS 2 FOR COMPOSITE 3 FOR GRAB SAMPLE				REPORTING LAB				ANALYST			
ENTER FREQUENCY OF SAMPLING											
1											
2											
3											
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31											

TOTAL											
Avg											
Max											
Min											

OPTIONAL REMARKS (AH REPORTING CODES MUST BE EXPLAINED IN THIS SECTION)

AH - FACILITY TAKEN OUT OF SERVICE 4/4/90 DUE TO CONSTRUCTION ACTIVITIES

65

SUB 6/15/90

I CERTIFY UNDER THE PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED AND BASED ON MY KNOWLEDGE THOSE INDIVIDUALS NAMED ARE RESPONSIBLE FOR OBTAINING THE INFORMATION. I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT.

DATE REPORT COMPLETED	SIGNATURE OF REPORTER	TITLE OF REPORTER
JUNE 13, 1990		DOE FMPC SITE MANAGER

DISTRIBUTION
WHITE - AGENCY
YELLOW - AGENCY
GREEN - REPORTER
FMPC ERAP 4/2/90

JU2 N 9501 960212

MONTHLY REPORT FORM

NAME ADDRESS CITY COUNTY ZIP

U. S. Department of Energy
 Feed Materials Production Center
 P. O. Box 398705
 Fernald, OH 45239

Hamilton

STATION CODE

1104606

REF ID#

DATE MONTH YEAR

May 1990

PAGE PRINTING DATE APPROVAL DATE

1 OF 1 3/24/92 OH000980

1272

SAMPLING STATION DESCRIPTION
006 Stormwater Retention Basin

NOTE THIS FORM MUST BE TYPED

ENTER 1 FOR CONTINUOUS 2 FOR COMPOSITE 3 FOR GRAB SAMPLE			REPORTING LAB			ANALYST		
ENTER FREQUENCY OF SAMPLING								
	2	1	2	3	1			
	2	6	9	998	1	999		
AY	pH (max) S.U.	pH (min) S.U.	REPORTING CODE	RESIDU T, NFL MG/L	O&G TOTAL MG/L	REPORTING CODE	CONDUI FLOW MGD	REPORTING CODE
01	7.8	7.7	00401	00530	00550	50050	0.382	
02	8.6	8.1	00402				0.387	
03	8.9	8.6		3	AA		0.375	
04	8.5	8.3		4	AA		0.352	
05	8.1	8.0		7	AA		0.095	
06	8.0	7.9		8	AA		0.277	
07	8.4	8.0		4	AA		0.503	
08	8.7	8.2		2	AA		0.507	
09	8.8	8.1		2	AA		0.539	
10	8.8	7.9		4	AA		0.353	
11	8.9	7.1		3	AA		0.268	
12	8.8	7.9		2	AA		0.269	
13	8.7	8.5		3	AA		0.222	
14	9.0	7.0		4	AA		0.358	
15	8.3	7.4		3	AA		0.401	
16	8.8	7.7		8	AA		0.374	
17	8.8	7.4		59	AA		0.295	
18	8.9	7.6		6	AA		0.417	
19	8.7	7.3		7	AA		0.313	
20	8.7	7.4		8	AA		0.435	
21	9.0	7.5		6	AA		0.493	
22	8.4	7.4		5	AA		0.488	
23	8.7	7.7		AA	AA		0.837	
24	8.6	7.8		AA	AA		0.819	
25	8.2	7.9		2	AA		0.807	
26	8.1	7.9		2	AA		0.838	
27	8.1	7.9		AA	AA		0.830	
28	8.4	7.6		AA	AA		0.820	
29	8.2	8.0		2	AA		0.818	
30	8.2	8.0		3	AA		0.828	
31	8.8	8.3		AA	AA			
OTAL	N/A	N/A		176	AA		15.530	
Avg	N/A	N/A		4.4	AA		0.501	
MAX	9.0	8.6		59	AA		0.838	
MIN	7.8	7.0		AA	AA		0.095	

ADDITIONAL REMARKS OR REPORTING CODES MUST BE EXPLAINED IN THIS SECTION.

SUB 6/15/90

67

I CERTIFY UNDER THE PENALTY OF PERjury THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED AND BASED ON MY KNOWLEDGE, THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. THOSE INDIVIDUALS ARE AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT.

DISTRIBUTION
 WHITE - AGENCY
 YELLOW - AGENCY
 GREEN - REPORTER

DATE REPORT COMPLETED	SIGNATURE OF REPORTER	TITLE OF REPORTER
5/20/90		DOE FMPC SITE MANAGER

5002 M 9501 900212

4500

U.S. DEPARTMENT OF ENERGY

11000004001 JUN 1990

2 2 04/21/90 EH0009

FEED MATERIALS PROD. CENTER

P.O. BOX 398705
FERNALD

001 MANHOLE 175, FINAL EFFLUENT BEFORE GREAT MIA

45239 HAMILTON

1272

FORM

2	2	2	2	2	2	2
998	998	998	998	998	998	998

CHROM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	NICKEL NI,TOT UG/L	SILVER AG,TOT UG/L	CHROMI HEX-DS UG/L	CB-BOD 5 DAY MG/L
-------------------------	--------------------------	------------------------	--------------------------	--------------------------	--------------------------	-------------------------

01034	01042	01051	01067	01077	01220	80082
-------	-------	-------	-------	-------	-------	-------

01

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AA	8.1	9.8	3.9	AA	AA
----	-----	-----	-----	----	----

0.6

AA	7.2	15.8	AA	AA	1.0
----	-----	------	----	----	-----

1.1

17.2	42.1	41.8	31.2	AA	AE	1.78
------	------	------	------	----	----	------

1.01

65.2	8.2	20.0	AA	AA	AE
------	-----	------	----	----	----

86.0	65.6	87.4	51.5	AA	2.0	4.49
17.7	14.6	19.7	11.3	AA	1.0	1.154
65.2	42.1	41.8	31.2	AA	1.0	1.78
AA	7.2	9.8	AA	AA	AA	0.6

AE - Analytical Data Not Valid

68

AGENCY

JUNE 11, 1990

DOE FMPC SITE MANAGER

9002 M 9501 990212

4500

U.S. DEPARTMENT OF ENERGY

11000004002 JUN 1990

1 2 04/21/90 CH0039
1672FEED MATERIALS PROD. CENTER
P.O. BOX 398705
FERNALD

002 SPILLWAY FROM STORMWATER RETENTION BASIN

45239 HAMILTON

FORM

	PH S.U.	RESIDU T. MG/L	DEG TOTAL MG/L	AMMONI NH3-N MG/L	NITRAT NO3-N MG/L	FLUDRI F,TOT MG/L	CHROM CR,TOT UG/L	COPPER CU,TOT UG/L	NICKEL NI,TOT UG/L	SILVE AG,TOT UG/L
01	00400	00530	00550	00610	00620	00951	01034	01042	01067	0107
02										
03										
04										
05										
06										
07										
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27										
28										
29										
30										
31										

AH - No Water Overflowed From Stormwater Retention Basin

J2 MED
7/11/90

69

AGENCY

June 11, 1990

DOE FMPC Site Manager

9002 R 9901 900212

4500

2 2 04/21/90 040009

U.S. DEPARTMENT OF ENERGY

11000004002 JUN 1990

1272

FEED MATERIALS PROD. CENTER

P.O. BOX 398705

002 SPILLWAY FROM STORMWATER RETENTION BASIN

FERNALD

45239 HAMILTON

FORM

CHROMI CONDUI
HEX-DS FLOW
UG/L MGD

01220 50050

AH

01

02

03

04

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AH - No Water Overflowed From Stormwater Retention Basin

JRMP 7/11/90

70

AGENCY

June 11, 1990

DOE FMPC Site Manager

J005 M 4009 -00212

4500

U.S. DEPARTMENT OF ENERGY

11000004601 JUN 1990

1 2 04/21/90 CH0009

FEED MATERIALS PROD. CENTER

P.O. BOX 398705

FERNALD

45239 HAMILTON

601 SEWAGE TREATMENT PLANT EFFLUENT AFTER DISINF

1272

FORM

	1 999	2 998	2 998	2 998	2 998	2 998	2 998	2 998	2 998
CONDUI FLOW MGD	BOD 5 DAY MG/L	RESIDU T. NFL MG/L	AMMONI NH3-N MG/L	FLUORI F,TOT MG/L	CHROM CR,TOT UG/L	COPPER CU,TOT UG/L	NICKEL NI,TOT UG/L	FEC CO MF-FCB \$/100M	
01	50050	00310	00530	00610	00951	01034	01042	01067	31616
02	0.096								
03	0.099								
04	0.090								
05	0.028		AA	0.27	0.50	1.9	9.0	4.2	10
06	0.086								
07	0.087	3.9	5.0						
08	0.160								
09	0.146								
10	0.116								
11	0.039								
12	0.022								
13	0.129		AA	0.29	0.60	AA	13.8	AA	6
14	0.100	2.7	2.0						
15	0.099								
16	0.086								
17	0.180								
18	0.005								
19	0.024								
20	0.039								
21	0.120	2.99	AA	0.16	0.50	5.5	9.8	AA	90
22	0.097								
23	0.079								
24	0.115								
25	0.021								
26	0.020								
27	0.049								
28	0.043	0.97	1.4						
29	0.043		AA	0.40	0.50	2.3	9.5	AA	8
30	0.017								
31	0.056								
	2.291	10.56	16.4	1.12	2.10	11.5	42.1	24.8	114
	0.076	2.89	2.4	0.25	0.54	3.3	11.3	7.8	14
	0.180	3.9	5.0	0.40	0.60	5.5	13.8	4.2	90
	0.005	0.97	AA	0.16	0.50	AA	9.0	AA	6

JFM:J
6/11/90

71

AGENCY

JUNE 11, 1990

DOE FMPC SITE MANAGER

9002 M 9004 900212

4500

U.S. Department of Energy
 Feed Materials Prod. Center
 P.O. Box 398705
 Fernald 45239 Hamilton

11000004601 JUN 1990
 601 Sewage Treatment Plant Effluent

2 2 3/24/90 OH000955

1272

FORM

1 1
999 999

pH pH
(MAX) (MIN)
S.U. S.U.

01	7.7	7.6
02	7.8	7.5
03	7.7	7.4
04	7.6	7.5
05	7.6	7.5
06	7.6	7.3
07	8.0	7.2
08	7.8	7.4
09	7.7	7.4
10	7.9	7.6
11	8.0	7.4
12	8.0	7.7
13	8.0	7.8
14	7.8	7.4
15	7.6	7.4
16	7.6	7.5
17	7.6	7.2
18	7.8	7.4
19	7.8	7.6
20	7.8	7.7
21	7.8	7.6
22	7.6	7.4
23	7.6	7.5
24	7.8	7.6
25	7.8	7.6
26	7.8	7.6
27	7.7	7.6
28	7.6	7.4
29	7.7	7.3
30	7.6	7.5
31		

N/A	N/A
N/A	N/A
8.0	7.8
7.6	7.2

JKM&D
7/11/90

72

AGENCY

June 11, 1990

DOE FMPC SITE MANAGER

9002 M 9501 S00212

4500

U.S. DEPARTMENT OF ENERGY

1I000004602 JUN 1990

1 1 04/21/90 0H0000
1272

FEED MATERIALS PROD. CENTER

P.O. BOX 398705

FERNALD

602 GENERAL SUNP, EFFLUENT DIRECTED TO MANHOLE

45239 HAMILTON

FORM

	1 999	3 1	2 1	2 1	2 1	2 1
CONDUI FLOW MGD	PH S.U.	CHROM CR,TOT UG/L	COPPER CU,TOT UG/L	NICKEL NI,TOT UG/L	CHROMI HEX-DS UG/L	
50050	00400	01034	01042	01067	01220	
01	0.090					
02	0.128					
03	0.0					
04	0.118	8.2	3.6	21.0	5.1	AA
05	0.050					
06	0.028					
07	0.0					
08	0.040					
09	0.208					
10	0.028					
11	0.0					
12	0.090	7.4	AA	11.2	13.9	AA
13	0.090					
14	0.125					
15	0.130					
16	0.117					
17	0.0					
18	0.090					
19	0.175					
20	0.050	8.2	7.9	19.1	8.2	AE
21	0.131					
22	0.130					
23	0.130					
24	0.135					
25	0.035					
26	0.118					
27	0.090					
28	0.135	7.6	6.0	10.8	AA	AE
29	0.090					
30	0.180					
31						
	2.731	N/A	19.3	62.1	35.4	AA
	0.091	N/A	4.6	15.0	8.6	AA
	0.208	8.2	7.9	21.0	13.9	AA
	0.0	7.4	AA	10.8	AA	AA

12/11/90
12/11/90 AE - Analytical Data Not Valid

73

AGENCY

JUNE 11, 1990

DOE FMPC SITE MANAGER

9002 11 9001 900212

4500

U.S. DEPARTMENT OF ENERGY

11000004604 JUN 1990

1 1 04/21/90 GH0009

FEED MATERIALS PROD. CENTER

P.O. BOX 398705

604 STORM SEWER LIFT STATION EFFLUENT MANHOLE 17

FERNALD

45239 HAMILTON

1272

FORM

2	2	1	2	3	2	2
6	6	999	998	1	998	998

PH (MAX) S.U.	PH (MIN) S.U..	CONDUI FLOW MGD	RESIDU T. NFL MG/L	O&G TOTAL MG/L	NITRAT NO3-N MG/L	FLUDRI F, TOT MG/L
---------------------	----------------------	-----------------------	--------------------------	----------------------	-------------------------	--------------------------

00401	00402	50050	00530	00550	00620	00951
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01
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8.0	7.9	0.055				
8.0	7.6	0.021				
7.8	7.8	0.035				
8.0	8.0	0.020				
8.0	7.8	0.081				
8.0	7.8	0.020				
8.0	7.9	0.048				
8.2	7.8	0.052	AA	AA	2.5	0.5
8.1	7.9	0.020				
7.8	7.7	0.064				
8.2	7.7	0.056				
7.9	7.7	0.023				
8.0	7.7	0.020				
7.9	7.8	0.020				
8.3	7.7	0.020	AA	AA	3.6	0.8
8.1	7.9	0.020				
8.4	7.8	0.020				

N/A	N/A	0.595	AA	AA	6.1	1.3
N/A	N/A	0.035	AA	AA	2.8	0.6
8.4	8.0	0.081	AA	AA	3.6	0.8
7.8	7.6	0.020	AA	AA	2.5	0.5

IR MED
6/11/90

AGENCY

74

JUNE 11, 1990

DOE FMPC SITE MANAGER

U.S. DEPARTMENT OF ENERGY

11000004605 JUN 1990

1 2 04421490 SH0003

FEED MATERIALS PROD. CENTER

P.O. BOX 398705

FERNALD 45239 HAMILTON

605 EFFLUENT FROM BIODENTRIFICATION DISC VIA 175

FORM

PH (MAX) S.U.	PH (MIN) S.U.	CONDUI FLOW MGD	BOD 5 DAY MG/L	RESIDU T. NFL MG/L	AMMONI NH3-N MG/L	NITRAT NO3-N MG/L	FLUORI F,TOT MG/L	CHROM CR,TOT UG/L	COPPE CU,TO UG/L
00401	00402	50050 AH	00310	00530	00610	00620	00951	01034	0104

01
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AH - Facility Taken Out of Service, 4/4/90, Due To Construction Activities

IRMP
7/11/90
AGENCY

75

U.S. DEPARTMENT OF ENERGY

11000004605 JUN 1990

2 2 04/21/90 0H0009-

FEED MATERIALS PROD. CENTER

P.O. BOX 398705

FERNALD 45239 HAMILTON

605 EFFLUENT FROM BIODENTRIFICATION DISC VIA 175

1272

FORM

NICKEL CHROMI

NI,TOT HEX-DS

UG/L UG/L

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AH - Facility Taken Out of Service, 4/4/90, DUE To Construction Activities

JRM 12 P 7/11/90

76

AGENCY

June 11, 1990

DOE FMPC Site Manager

12 M 9501 20612

4500

U.S. Department of Energy
Feed Materials Prod. Center
P.O. Box 398705
Fernald 45239 Hamilton

11000004606 JUN 1990

JUN 1990

1 1 3/24/90 OH0009580

606 Stormwater Retention Basin

1272

FORM

2 6	2 6	1 999	2 998	3 1
pH (MAX) S.U.	pH (MIN) S.U.	CONDUI FLOW MGD	RESIDU T, NFL MG/L	O&G TOTAL MG/L
00401	00402	50050	00530	00550
8.5	8.1	0.800	AA	AA
8.8	7.3	0.801	AA	AA
8.1	7.7	0.824	4.0	AA
8.5	8.3	0.809	4.0	AA
8.2	8.0	0.815	AA	AA
7.8	7.7	0.309	2.0	AA
7.8	7.7	0.547	AA	AA
7.8	7.7	0.665	3.0	AA
7.8	7.5	0.534	AA	AA
7.6	7.3	0.777	AA	AA
7.7	7.6	0.785	AA	AA
7.7	7.6	0.477	AA	AA
7.8	7.5	0.427	AA	AA
7.8	7.5	0.398	AA	AA
8.0	7.5	0.366	AA	AA
7.8	7.8	0.371	AA	AA
8.2	7.8	0.149	6.0	AA
8.4	8.1	0.441	2.0	AA
8.7	8.3	0.262	3.0	AA
8.6	8.0	0.326	4.0	AA
8.6	8.0	0.128	34.0	AA
8.2	7.7	0.233	7.0	AA
8.3	8.1	0.355	4.0	AA
8.4	8.2	0.363	3.0	AA
8.4	8.1	0.354	4.0	AA
8.3	8.1	0.358	3.0	AA
N/A	N/A	12.674	107.0	AA
N/A	N/A	0.487	3.0	AA
8.8	8.3	0.824	34.0	AA
7.6	7.3	0.128	AA	AA

AGENCY

JUNE 11, 1990

DOE FMPC SITE MANAGER